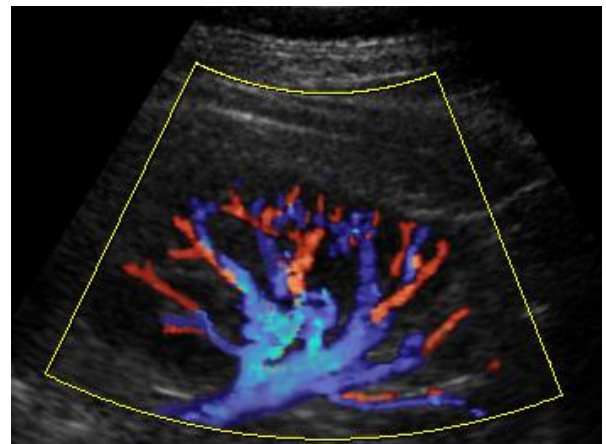
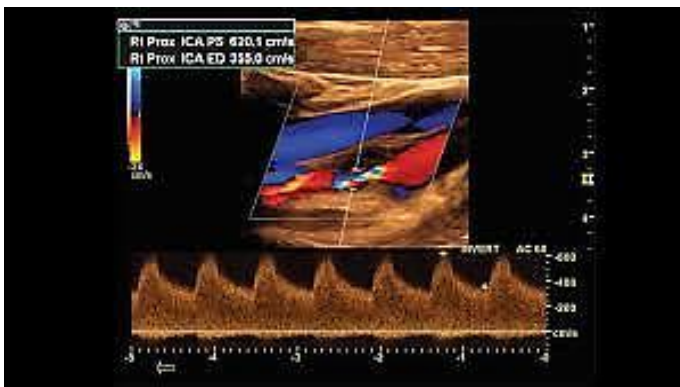
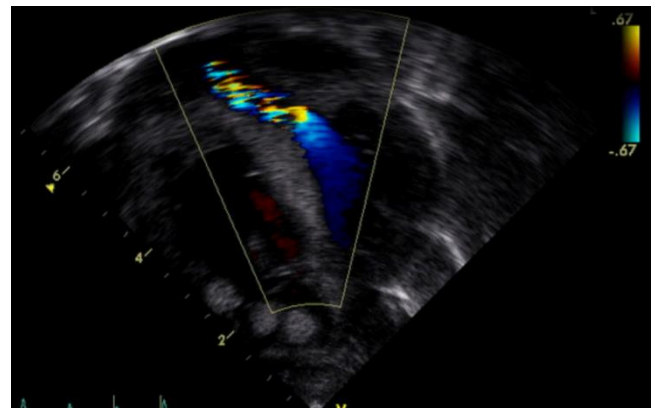
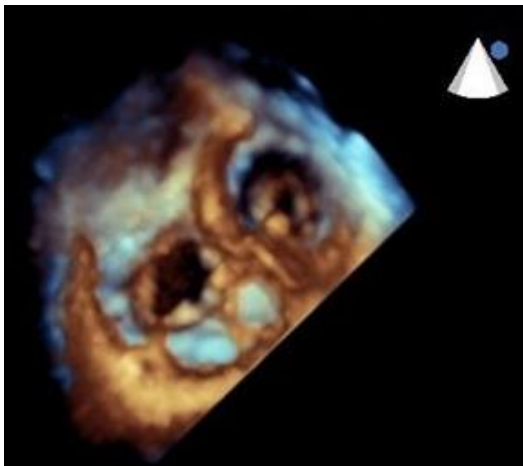


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## **DMS: ECHOCARDIOGRAPHY & VASCULAR SONOGRAPHY STUDENT HANDBOOK CLASS OF 2015 – 2017**



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**Acknowledgment in receiving the Student handbook:**

This page is to be signed by the student and returned to the Program\_Director upon receipt of this handbook.

**PREGNANCY**

To assure the radiation safety of your baby in the event you become pregnant, please read the Pregnancy Radiation Safety Policy carefully. If you wish to declare or undeclare a pregnancy, you must do so in writing according to the policies and procedures in this handbook.

**STUDENT PHYSICAL EXAMINATION AND ASSOCIATED INFORMATION RELEASE**

I hereby give my permission for the release of my physical examination and associated information (including but not limited to laboratory results and TB skin test results) to any GVSU Diagnostic Medical Sonography clinical education center to which I am assigned. I realize that I may rescind this permission by providing a written statement to that effect to the Diagnostic Medical Sonography Programs Director/Coordinator but understand that any information previously released with my permission may be retained by the clinical education center that received it.

\_\_\_\_\_  
Date student signature

Under the Federal Family Education Rights & Privacy Act of 1974 (Buckley Amendment), students have the right to inspect and review any and all official records, files, and data pertaining to them. Adequate and reasonable notice of intent to inspect must be given and access may require the physical presence of a university official during normal operating hours.

**CRIMINAL RECORDS**

Individuals who have been involved in a criminal proceeding or charged with or convicted of a crime may not be eligible for national certification by the American Registry of Diagnostic Medical Sonographers. Because this certification is available to graduates of the diagnostic medical sonography programs as part of preparation for clinical practice, students to whom this may apply are strongly advised to work with the ARDMS for pre-application review of eligibility for certification from their website at [www.ardms.org](http://www.ardms.org) (Application Resources, Pre-Application Criminal). The ARDMS may be contacted by phone at 301-738-8401.

**ACCREDITATION AND NATIONAL BOARD EXAMINATION**

Students who receive a B.S. degree in Diagnostic Medical Sonography Programs from GVSU are eligible for the American Registry of Diagnostic Medical Sonographers examination. The ARDMS has established eligibility for students who complete the B.S. degree program under their prerequisites 3B (see their website at [www.ardms.org](http://www.ardms.org) for current information). This program has been accredited with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT) and in conjunction with Commission on Accreditation of Allied Health Programs (CAAHEP). The program is currently adhering to these standards and they are posted on the CHS 411 lab bulletin board. With this accreditation you have the right to notify the JRC-CVT if you believe the university is not adhering to these standards. You may contact the JRC-CVT at 1449 Hill Street, Whitinsville, MA 01588 phone 978-456-5594.

**GRADING STANDARDS**

All students pursuing degrees in Diagnostic Medical Sonography: Echocardiography and Vascular Sonography are required to attain a minimum of 80.0% (B-) competency in all courses required for the program (learning modules). Students who fail to achieve this level of competency will be required to repeat all courses not meeting this standard and may be restricted from additional clinical courses until the deficiency has been corrected. In addition, other courses with pre or co-requisites may not be available to students until the deficiencies have been corrected.

**ACCESS TO CLINICAL EDUCATION**

Because the university has an obligation to assure clinical education centers that patient care standards will not be compromised by students, no student will be allowed to continue in clinical education if previous courses are not met. Note that this includes the achievement of satisfactory performance on clinical affective evaluations from self-assessment as well as from clinical practitioners, coordinators, instructors at educational sites and the demonstration of professional behavioral development. Failure to meet any of these objectives from the clinical course syllabi will result in a failing grade for the current clinical education course as well as being restricted from further clinical education experiences.

**RECEIPT OF STUDENT HANDBOOK**

I have received a copy of the current Student Handbook. It is my understanding that if I have any questions concerning material in this handbook I may contact any of the Grand Valley State University Cardiovascular Sonography faculty for further clarification. I understand and agree to the specific clauses above but realize that I am responsible for all the information contained in this handbook as well as any subsequent additions, and I will be expected to conform to its procedures during my enrollment in the program, including all clinical education.

\_\_\_\_\_  
Date student signature printed name

## **CLINICAL EDUCATION TRAVEL EXPECTATIONS**

Clinical education may include assignments to clinical education sites in the range of 3 hours one-way driving from GVSU's Center for Health Sciences. An eight hour day is expected at all clinical educational sites. This time does not include travel time.

It is the intent of the university to limit these assignments to one rotation. In addition, there are procedures in place to allow half days for snow and ice storms.

## **GVSU ULTRASOUND SCANNING OF STUDENTS**

Diagnostic Medical Sonography students are required to utilize live laboratory students for scanning. These subjects cannot be subjected to scanning in the GVSU laboratories unless they have read and signed the GVSU DMS Programs Liability Release Form prior to any scanning.

All students planning on being scanned must comply with this requirement. The form must be on file with the Program Director before the subject can be used for any scanning. The form comprises the following 3 pages.

---

**LIABILITY RELEASE FORM**

I, \_\_\_\_\_ elect to participate in the optional volunteer learning experience of live ultrasound scanning.  
(Print last name, first name)

By signing this release form, I acknowledge that I have read the attached American Institute of Ultrasound in Medicine (AIUM) statements, and that I have been informed of the possible risks of ultrasound scanning. It is my understanding that my experience in the classroom will be limited by my instructor who serves as an information source and observer, but not as a guarantor of safety. It is also my understanding that I will be advised to consult with my personal physician at my own expense if the instructor observes any abnormality during the course of the volunteer scanning experience.

I realize that by signing this document, I am releasing from liability and holding harmless the members of the Board of Trustee of Grand Valley State University, and their officers and employees, including the faculty and staff of the Diagnostic Medical Sonography Programs.

I also understand that it is my responsibility to consult a physician regarding any possible negative effects which may result from my participation in the ultrasound scanning activity and the effects that it may have on my health and well-being.

I realize that my participation in this program is wholly voluntary and that the purpose of participating in live ultrasound scanning is to learn as much as possible about ultrasound.

By signing this document, I certify that I have read and understand its contents.

\_\_\_\_\_  
Student/Volunteer/ Legal Guardian signature

\_\_\_\_\_  
Date

## I. AIUM Statements on Diagnostic Medical Ultrasound Safety

### AIUM STATEMENT ON IN VITRO BIOLOGICAL EFFECTS Approved by the AIUM, March 1998

It is difficult to evaluate reports of ultrasonically induced in vitro biological effects with respect to their clinical significance. The predominant physical and biological interactions and mechanisms involved in an in vitro effect may not pertain to the in vitro situation. Nevertheless, an in vitro effect must be regarded as a real biological effect.

Results from in vitro experiments suggest new endpoints and serve as a basis for design of in vivo experiments. In vitro studies provide the capability to control experimental variables and thus offer a means to explore and evaluate specific mechanisms. Although they may have limited applicability to in vivo biological effects, such studies can disclose fundamentals intercellular or intracellular interactions.

While it is valid for authors to place their results in context and to suggest further relevant investigations, reports of in vitro studies which claim direct clinical significance should be viewed with caution.

### AIUM STATEMENT ON CLINICAL SAFETY Approved March 1998, Reaffirmed 1992

Diagnostic ultrasound has been in use since the late 1950's. Given its known benefits and recognized efficacy for medical diagnosis, including use during human pregnancy, American Institute of Ultrasound in Medicine herein addresses the clinical safety of such use:

No confirmed biological effects on patients or instruments operators caused by exposure at intensities typical of present diagnostic ultrasound instruments have ever been reported. Although the possibility exists that such biological effects may be identified in the future, current data indicate that the benefits to patients of the prudent use of diagnostic ultrasound outweigh the risks, if any, that may be present.

### AIUM STATEMENT ON SAFETY IN TRAINING AND RESEARCH Approved March 1998

Diagnostic ultrasound has been in use since the late 1950's. No adverse biological effects on patients resulting from this usage have ever been reported. Although no hazard has been identified that would preclude the prudent and conservative use of diagnostic ultrasound in education and research, experience from normal diagnostic practice may or may not be relevant to extended exposure times and altered exposure conditions. It is therefore considered appropriate to make the following recommendations:

In those special situations in which examinations are to be carried out for purposes other than direct medical benefit to the individual being examined, the subject should be informed of the anticipated exposure conditions, and of how these compared with conditions, and of how these compare with conditions for normal diagnostic practice.

When there is no direct medical benefit to a person undergoing an ultrasound exam (e.g. training or research), it is necessary to **educate** the person regarding the risks of the procedure and obtain his or her **informed consent**.

IN VIVO AND IN VITRO STUDIES:

#### IN VIVO BIOEFFECT INVESTIGATIONS

In vivo means "observed in living tissue"

The AIUM suggests the following:

- Do not perform studies without reason
- Do not prolong studies without reason
- Use the minimum output power and maximum amplification to optimize

The following are recent conclusions of in vivo bioeffects investigations:

When compared with unfocused beams, focused beams require higher intensities to produce bioeffects. This occurs because smaller beam area means less thermal build up and less interactions with cavitation nuclei.

Note: An unfocused ultrasound beam causes a higher temperature elevation than a focused ultrasound beam at the same intensity.

It has been proved that, compared with a broad unfocused beam, highly focused ultrasound is much less likely to cause bioeffects

Maximum intensities (SPTA):      100mW/cm<sup>2</sup> - unfocused      1W/cm<sup>2</sup> - focused

### **CONCLUSIONS REGARDING IN VIVO MAMMALIAN BIOEFFECTS**

**Approved by the AIUM, October 1992**

In the low megahertz frequency range there have been (as of this date) no independently confirmed significant thermal biological effects in mammalian tissues exposed in vivo to unfocused ultrasound with intensities below 100 mW/cm<sup>2</sup>, or to focused ultrasound with intensities below 1W/cm<sup>2</sup> SPTA

### **IN VITRO BIOEFFECTS INVESTIGATIONS**

In vitro means "observed in test-tubes" in an experimentally controlled environment.

Advantage of in vitro studies: Careful measurements can be made under rigorous experimental conditions.



## II. MISSION STATEMENT AND PROGRAM GOALS

The Diagnostic Medical Sonography programs' mission is to provide the graduates with the knowledge, clinical skills, and effective behaviors for a career in sonography that will:

1. Demonstrate knowledge in appropriate didactic areas and integrate this knowledge into competency-based clinical experience.
2. Apply skills to exceed the standards of the profession.
3. Analyze clinical data.
4. Write effectively in more than one format as part of the writing across the professional curriculum initiative.
5. Provide excellent quality care to enrich and support the community through engagement.
6. Engage and maintain personal and national level professional relationships.

The programs' provide students opportunities to develop technical knowledge and personal skills necessary for a career in the sonographic sciences. The curriculum is designed to combine compassion with integrity in order to shape a student into a professional. The program provides a unique learning environment which includes state of the art equipment. By recruiting the help of highly qualified sonography faculty, students acquire skills necessary to become successful diagnostic medical sonographers. [The program mission statement was authored in 2005 by the inaugural Diagnostic medical Sonography Classes of 2007 in General (Abdomen and Obstetrics/Gynecology) and Echocardiography.]

### Program Goals

The graduate of the Diagnostic medical Sonography programs will be able to:

1. Perform beyond minimum entry-level diagnostic medical sonography skills according to the Society of Diagnostic Medical Sonographer's scope of practice for the diagnostic medical sonographer, American Registry of Diagnostic medical Sonographers content specifications for their various examinations, and the minimum Standards and Guidelines for the Accreditation of Educational Programs in Diagnostic Medical Sonography, SDMS Scan Document, ASE Outline of Sonography Core Curriculum in Echocardiography, SVU Standards for Undergraduate Educational Programs in Vascular technology, and the ARDMS Content and Vascular Sonography. This includes, but is not limited to the ability to:
  - 1.1 Utilize oral and written communication with patients and colleagues.
  - 1.2 Demonstrate knowledge and understanding of human gross and sectional anatomy.
  - 1.3 Demonstrate knowledge of physiology, pathology, and pathophysiology.
  - 1.4 Provide patient care and comfort.
  - 1.5 Demonstrate knowledge and understanding of acoustic physics, Doppler ultrasound principles and ultrasound instrumentation.
  - 1.6 Perform appropriate quality assurance testing and detect equipment malfunctions.
  - 1.7 Recognize and identify the sonographic appearance of normal anatomic structures associated with each learning concentration.
  - 1.8 Recognize and identify the sonographic appearance of abnormal anatomic structures associated with each learning concentration.
  - 1.9 Provide patient education related to medical ultrasound and/or other noninvasive diagnostic vascular techniques, and promote principles of good health.
  - 1.10 Analyze diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician.
  - 1.11 Integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.
  - 1.12 Correlate topographical and sectional anatomy in localization of anatomical structures.
  - 1.13 Provide basic patient nursing care and cardio-pulmonary resuscitation.
  - 1.14 Perceive patterns of physical and emotional stress exhibited by patients.
  - 1.15 Recognize patient symptoms of disease progression, the complications, etiology, and prognosis
  - 1.16 Consult with physicians as appropriate for total quality care of the patient.
  - 1.17 Interact in a professional manner with other health care personnel involved in the care of the patient.

2. Meet professional specifications established for national registration by the American Registry of Diagnostic Medical Sonographers in the specialty areas of study.
3. Build upon sound principles of general education by learning how to communicate well, think analytically, be intellectually adaptive, integrate knowledge and experience from different disciplines apply ethical standards and values to the practice of diagnostic medical sonography and appreciate social and cultural diversity.
4. Function as an active member of the health care team.
5. Participate in the advancement of knowledge through research.
6. Engage in lifelong learning and service.

### III. ACADEMICS

#### A. Outside Employment

If a student plans to engage in employment in addition to participating as a sonography student, the program recommends a schedule of less than 25 hours per week. Students should remember that academic and clinical schedules will not be revised for their employment requirements.

#### B. Standards of Achievement

Minimum grade point average in each course is a B- (80.0%). Failure to achieve this standard in a single course may allow a student to continue in the program (depending on individual course pre-requisites). Failure to achieve this standard in more than one course will result in the student being required to withdraw from the program and reapply for admission the next year.

#### C. **COURSE FAILURE/REPEATS**

The following applies to courses with prefixes of RIS, RIT, RIU, and RIE:

All DMS: Echocardiography and Vascular Sonography Students are limited to one course repeat during the length of the program. If a student fails (see grading scale) a second time, he/she will be invited to apply for re-admission to the program.

100% of the mandatory laboratory procedures established by faculty in the first laboratory procedures course in each emphasis must be completed at mastery level as a prerequisite to attend any clinical education course.

Clinical education independent study courses will be scheduled only when clinical positions are available at sites with University clinical education agreements. Independent study courses are offered at the discretion of the faculty.

#### D. Readmission

Readmission to the program requires a new application according to the procedures and policies in effect at the time of the application.

#### E. American Registry of Diagnostic medical Sonographers

The university expects students to sit for the appropriate examinations of the ARDMS upon completion of the program. It is difficult to practice sonography without appropriate professional credentials. More information on these examinations and your eligibility is available at [www.ardms.org](http://www.ardms.org).

#### F. The American Registry of Diagnostic Medical Sonographers (ARDMS) has indicated that students who qualify for their examinations under baccalaureate degree in diagnostic medical sonography eligibility may take all examinations in their major and minor areas of study in diagnostic medical sonography as soon as they meet qualifications, which is often before graduation occurs. This eligibility is extended with the intent that students will complete their baccalaureate degree in diagnostic medical sonography in a contiguous manner. Student who complete ARDMS examinations but do not graduate from their baccalaureate degree programs in diagnostic medical sonography will have their registrations revoked upon notice by the university that certified the individual for the examinations. Grand Valley State University Diagnostic Medical Sonography programs in adult echocardiography, pediatric echocardiography, and vascular sonography define continuous registration as following the normal registration requirements for full time students in the programs that students must register for fall, winter, and spring/summer terms. Spring Summer is defined as any registration for spring, or any summer term recognized by the university. Any student who has completed ARDMS examinations and fails to register for all terms as described above will be reported to the ARDMS.

#### IV. CLINICAL EDUCATION CENTERS

The Grand Valley State University Department of Diagnostic & Treatment Sciences is currently affiliated with a number of Clinical Education Centers. Students change clinical site rotation throughout the program with expectations that each student should be assigned to at least three (3) different centers during the full series of clinical education courses. This procedure meets a major objective of the program, which is to increase learning experiences by including a wide variety of administrations, procedures, and equipment.

##### DIAGNOSTIC MEDICAL SONOGRAPHY CLINICAL EDUCATION CENTERS:

##### Diagnostic Medical Sonography Echocardiography Concentration (Adult Echocardiography and Pediatric Echocardiography or Vascular Sonography)

###### **Ann & Robert H. Lurie Children's Hospital of Chicago**

225 E Chicago Ave  
Chicago, IL 60611

###### **Advanced Vascular Surgery**

1815 Henson Ave  
Kalamazoo Township, MI 49048

###### **Borgess Medical Center**

1521 Gull Rd.  
Kalamazoo, MI 49048

###### **Bronson Methodist Hospital**

601 John St.  
Kalamazoo, MI 49007

###### **Mercy Health Physician Partners Grand River Cardiology**

1000 East Paris St, SE (Suite 188)  
Grand Rapids, MI 49546

###### **Grand River Cardiology (site 2)**

2373 Sixty-Fourth St SW, Suite 200  
Byron Center, MI 49315

###### **Hayes Green Beach Memorial Hospital**

321 E Harris St  
Charlotte, MI 48813

###### **The Heart + Wellness Institute**

5043 Cascade Road, SE  
Grand Rapids, MI 49546

###### **Holland Hospital**

602 Michigan Ave.  
Holland, MI 49423

###### **McLaren Greater Lansing**

401 W. Greenlawn  
Lansing, MI 48910

###### **Memorial Hospital and Health System**

615 North Michigan Street  
South Bend, IN 46601-1087

###### **Mercy Health Saint Mary's**

200 Jefferson SE  
Grand Rapids, MI 49503

###### **Metro Health Hospital/ Heart and Vascular Institute**

5900 Bryon Center Ave. SW  
Wyoming, MI 49519

###### **Munson Medical Center**

1105 6<sup>th</sup> Street  
Traverse City, MI 49684

###### **Sparrow Hospital**

1215 E. Michigan Ave.  
Lansing, MI 48912

**Sparrow Thoracic Cardiovascular Institute**

1200 E. Michigan Ave. Suite 580  
Lansing, MI 48912

**Spectrum Health – Blodgett Hospital**

1840 Wealthy St. SE  
Grand Rapids, MI 49506

**Spectrum Health – Cardiovascular Imaging Lab**

2900 Bradford St NE  
Grand Rapids Charter Township, MI 49525

**Spectrum Health – Gerber**

212 S Sullivan Ave  
Freemont, MI 49412

**Spectrum Health– Helen DeVos Children’s Hospital**

100 Michigan Street N.E.  
Grand Rapids, MI 49503

**Spectrum Health- Heart & Vascular Center-Holland Office**

602 Michigan Ave.  
Holland, MI 49423

**Spectrum Health – Meijer Heart Center**

100 Michigan Street N.E.  
Grand Rapids, MI 49503

**Spectrum Health- United Memorial Hospital**

615 S Brower St.  
Greenville, MI 48838

**Spectrum Health- West Pavilion**

6105 Wilson Ave SW  
Wyoming, MI 49418

**Spectrum Health- Zeeland Hospital**

8333 Felch Street  
Zeeland, MI 49464

**Spectrum Health Medical Group: Vascular Surgeons**

4069 Lake Dr. SE  
Grand Rapids MI

**Traverse Heart and Vascular**

1200 Sixth Street, Suite 200  
Traverse City, MI 49684

**Veteran’s Administration Ann Arbor Health Care System**

2215 Fuller Rd.  
Ann Arbor, MI 48105

**West Michigan Cardiology**

743 East Beltline Ave NE  
Grand Rapids MI

**V. CLINICAL EDUCATION ATTENDANCE**

During the clinical education course sequence students experience at least three different clinical rotations. Students attend clinical education 2-5 days per week depending on the course. Students are expected to adhere to a schedule consistent with the expectations of the clinical education center for an eight hour work day. Exact start and end times, lunch and break schedules, etc. are determined by the clinical education center. Clinical education centers are expected to schedule students for an eight hour clinical day per semester hour of academic credit. Forty educational contact hours must not exceed 40 hours/week.

**1. CLINICAL ROTATION MASTER PLAN FOR ECHOCARDIOGRAPHY (ADULT)**

Semester	Rotation	Course	Semester Hour Credits	Total Scheduled Clinical Hrs.
Winter Junior Year	1 <sup>st</sup>	Adult Echocardiography Clinical Education I	2	224
Spring/Summer Senior Year	1 <sup>st</sup>	Adult Echocardiography Clinical Education II	3	312
Fall Senior Year	2 <sup>nd</sup>	Adult Echocardiography Clinical Education III	1	112
Winter Senior Year	3 <sup>rd</sup>	Adult Echocardiography Clinical Education IV	1	112
TOTAL			7	760

**2. CLINICAL ROTATION MASTER PLAN FOR ECHOCARDIOGRAPHY (PEDIATRIC)**

Semester	Rotation	Course	Semester Hour Credits	Total Scheduled Clinical Hrs.
Spring/Summer Senior Year	1 <sup>st</sup>	Pediatric Echocardiography Clinical Education I	2	208
Fall Senior Year	2 <sup>nd</sup>	Pediatric Echocardiography Clinical Education II	2	224
Winter Senior Year	3 <sup>rd</sup>	Pediatric Echocardiography Clinical Education III	2	224
TOTAL			6	656
+ Adult Echocardiography Totals			7	760
GRAND TOTAL			13	1416

**3. CLINICAL ROTATION MASTER PLAN FOR VASCULAR SONOGRAPHY**

Semester	Rotation	Course	Semester Hours Credits	Total Scheduled Clinical Hrs.
Spring/Summer Senior Year	1 <sup>st</sup>	Vascular Sonography Clinical Education I	2	208
Fall Senior Year	2 <sup>nd</sup>	Vascular Sonography Clinical Education II	2	224
Winter Senior Year	3 <sup>rd</sup>	Vascular Sonography Clinical Education III	2	224
TOTALS			6	656
+ Adult Echocardiography Totals			7	760
GRAND TOTAL			13	1416

**4. CLINICAL PLACEMENTS**

- a. Students are informed in advanced of the site of the next clinical rotation. This schedule is distributed to students and the Clinical Education Centers.
- b. Clinical faculty at the clinical education centers determine the student rotations and assignment at a particular institution based on direction from the university.

## **5. CLINICAL EDUCATION PLAN CORRELATION WITH DIDACTIC AND LABORATORY CURRICULUM**

Clinical education is correlated with didactic and laboratory courses each academic semester as currently outlined in the degree emphasis plan of the university. This plan outlines each didactic course and their accompanying laboratories are prerequisites for each clinical course. Each clinical course is designed to place students into a clinical environment that will provide adequate patient clinical cases, ARDMS or CCI registered sonographers, and ultrasound equipment as defined by the Standards and Guidelines of the Joint Review Committee on Education in Cardiovascular Technology; consistent with the instruction previously or concurrently provided in the procedures student is studying.

Clinical correlation is achieved by requirements that students are expected to study, listen to lectures, provide feedback, and successfully meet didactic assessment standards at an 80.0% level for each didactic course. Laboratories are held in the ultrasound scanning facilities at the university and are closely correlated with each didactic course. Students are expected to observe demonstration of each procedure by the faculty, practice under direct guidance, practice independently, and meet a 100% pass rate on each laboratory competency (which is achieved using the identical evaluation instrument that will be used in the clinical courses from the SDMS SCAN document). Students then take the didactic and laboratory information into their clinical courses where they are expected to observe a qualified sonographer performing each procedure, practice the procedure themselves on patients until they believe they can meet the competency expectations of an ARDMS or CCI qualified sonographer, then request and pass at 100% level a competency on each of the limited number of proficiency evaluations (which are repeated competency evaluations that have already been achieved).

The program adheres to an education philosophy that recognizes that students do not learn in a linear or outline fashion. Constructivism is an approach to teaching and learning based on the premise that cognition is the result of mental construction in which students learn by fitting new information together with what they already know. We support this philosophy by making it possible for a student to learn how to perform a specific procedure in a clinical environment prior to its presentation in a course or laboratory at the university because there is a diverse range of procedures performed daily at the clinical sites. Students are permitted to achieve clinical competency before laboratory or didactic competency but are not excused from the course and lab follow up.

## **6. CURRICULUM SEQUENCE AND INTEGRATION WITH PROCEDURES COURSES, LABORATORIES, AND CLINICAL EDUCATION COURSES**

Grand Valley State University's Diagnostic Medical Sonography programs all require students to pass each course module at an 80.0% level. Students take didactic and laboratory courses their first term in the program. This assures clinical education sites that students are competent to perform clinical procedures the first day they attend clinical education, which is their second term in the program. Beginning with the second term all students attend didactic procedures courses, correlated laboratory courses, and clinical education simultaneously each semester with the exception of the summer term, which is clinical education only. We believe this makes both faculty and clinicians responsible for detailed information on a daily basis.

### **A. ASSIGNMENT OF ROTATIONS**

1. Rotation assignments are made by the specific Program Director at the university.
2. Students will be assigned their first clinical rotation in the winter semester of the first year of the professional program.
3. Each student will be assigned at least (3) different clinical education sites.
4. Students cannot receive academic credit for clinical education performed while being paid.

### **B. STUDENT RESPONSIBILITIES**

1. All students are subject to the rules and regulations established by the affiliating Clinical Education Center as well as the university and program policy and procedures.
2. Students are responsible for their own transportation to and from the Clinical Education Center as well as all personal needs while at the institution. This includes parking expenses.
3. All students are required to have a valid basic CPR card (both adult and pediatric CPR) during clinical education.
4. All students are required to have physical examination information, according to university and clinical education center requirements, on file with the university prior to attending clinical education.
5. Students are responsible for all possible costs incurred for criminal background check, drug screening or other requests of clinical education sites, prior to their attendance at such sites.

### **C. STUDENT DIRECT SUPERVISION**

1. All diagnostic medical sonography students shall be under supervision of a registered sonographer of the American Registry of Diagnostic Medical Sonographers (ARDMS) or Cardiovascular Credentialing International (CCI) to the specific specialty at all times.

2. Indirect supervision is defined as an ARDMS registered sonographer or (CCI) sonographer specific to the practice area physically present in the same room or departmental area as the student and the patient.

#### **D. CLINICAL EDUCATION SCHEDULES**

##### **1. ROTATIONS**

- a. The length and nature of clinical rotations will be determined solely by the university.
- b. The university will determine the total number of clinical hours required of each student for each rotation and/or academic term.

##### **2. SCHEDULING**

- a. Clinical Education will be scheduled only during university class sessions. Clinical education schedules will follow the university calendar, including holidays, and breaks. No clinical education is scheduled during university finals weeks or between terms.
- b. With advance approval by both the Program Director and the clinical education center, and within the definitions of approved make up as defined below, students may make up clinical education time outside the university schedule and this time will be considered part of the university clinical education schedule.
- c. Starting time for Clinical Education Centers is set by the Clinical Instructor for each institution. A clinical day is variable that consists of eight hours between 6:30A and 11:00P. Special assignments may be required before or after these hours on occasional basis but assignments for these purposes must be acceptable to both the clinical education center and the student by advanced agreement. Students who cannot make accommodation for these assignments may have their clinical grades reduced. Students educational contact hours/week may not exceed 40 hours.
- d. Day to day scheduling and room or students assignments will be made by the Clinical Instructor at each Clinical Education Center as best meets the educational needs of students according to the patient care schedule for that facility. Students must remember that patients always come first at clinical sites.

It is logistically impossible to assign all students to the same clinical activities at the same time in order to perfectly correlate didactic and laboratory with clinical instruction. Therefore, it is the students' responsibility to work in good faith to coordinate competencies with assignments and university didactic and laboratory instruction. The best method of achieving this goal is to communicate details regarding which procedures have been taught to both clinical staff and university faculty as needed.

- e. Student requested changes in clinical schedules must be cleared in advance with the Program Director.
- f. Clinical schedules will not be changed to accommodate student work schedules or vacations.
- g. Clinical schedules may be changed to accommodate courses required for the diagnostic medical sonography degree or any previously approved courses at the university when advance notice of at least two (2) weeks is given the Program Director.
- h. Students should be allowed the same time as staff sonographers in the institution for breaks and lunch.
- i. Banking of clinical hours may be used to complete clinical education requirements in advance of missing clinical education. This includes achievement of clinical competency credits.
  - (1) The banked hours may be used to replace only those hours missed from a clinical education course required by the program or previously approved courses and associated travel.
  - (2) The banking option may be used to plan for pregnancy.
  - (3) Banking may occur any time but banking hours may not cause a student schedule to exceed 40 education contact hours in any one week.
  - (4) Students must have written permission from the Program Director before establishing a banking schedule of clinical time with the Clinical Instructor.

##### **3. RECORD OF CLINICAL EDUCATION TIME**

- a. Time records are used at all Clinical Education Centers.
- b. Time of arrival and time of departure must be recorded appropriately.
- c. Clinical instructors may allow students to make up time that has been requested upon an excused absence along with approval of the Program Director.

- d. All students are required to be present in their assigned areas for clinical education during the hours established with the Clinical Instructor.

Students may not leave the Clinical Education Centers without notifying the Clinical Instructor or the Clinical Instructor's designee first.

- e. Falsification of time records is considered cheating and is a breach of university and professional ethics and will merit appropriate disciplinary action.
- f. Students may attend clinical education for only the number of days (semester hour credits) for which they are registered except for time voluntarily requested by the student AND pre-approved by the Program Director for specific learning objectives. No clinical grading requirements may be accumulated during clinical education time attended under this policy (e.g., competencies, proficiencies, etc. cannot be achieved during excess voluntary clinical education time.)

#### 4. ABSENCE FROM CLINICAL EDUCATION

Students must call in advance for all absences and either leave voice mail or obtain the name of the person taking the message. This information must be noted on the Attendance Record. Both the Clinical Instructor at the clinical site AND the Program Director must be notified before the scheduled starting time.

All absences from clinical education are classified as either excused, unexcused, or tardy.

All clinical education absences and make up time is defined in half day (4 hour) increments. For example, leaving clinical education due to illness after 7 hours results in losing credit for 4 hours of the day.

- a. No more than 8 hours of clinical time will be awarded in any one day. 40 educational contact hours per week must not be exceeded.
- b. Clinical grading deadlines will be extended only for cancellation of clinical education, funerals, jury duty, and military duty, and excused leave of absence for extenuating circumstances as approved by the Program Director. The definitions below will be applied to these types of absences.
- c. Excused absences, as listed below, do not have to be made up but may be if the student desires additional time for competency credit completions and provides appropriate documentation.

(1) Holidays are granted according to the Grand Valley State University academic calendar.

(2) Cancellation of clinical education

- (a) Students are not required to attend clinical education on days when the university announces the cancellation of classes due to weather.
- (b) Announcements are made on radio and television by 6:30AM. The detailed policy is available at [www.gvsu.edu/publicsafety](http://www.gvsu.edu/publicsafety) (emergency/weather).
- (c) The Clinical Education Center does not have to be notified of your absence due to weather, although a courtesy call would be appreciated.

(3) Upon approval by the Clinical Coordinator in advance, the following excused absences may be granted:

(a) Funeral leave

- (1) Up to two (2) days in case of death in the immediate family.
- (2) Immediate family is defined as spouse, child, parent, grandparent, brother, or sister, brother or sister-in-law, mother or father-in-law, nephew or niece.
- (3) Proof of death is required in the form of a published notice (newspaper or funeral home announcement), death certificate, or other notice as approved by the Program Director.

(b) Jury duty

(c) Military duty

(d) Snow or icy weather leave may be taken up to 4 half days (2 days total absence) during the Winter Semester only. Note that half days are allowed in order to permit students to go home early when weather deteriorates during a day in clinical education or to stay home for part of a day until roads are safer for travel. This policy is designed to encourage students to avoid driving in poor weather conditions while granting a half day credit to students who are able to attend part of a clinical day due to improved or deteriorating weather conditions.



- (1) A half day is defined as 4 hours.
  - (2) All other policies apply, including calling both clinical education center and university clinical coordinator in advance.
  - (4) Attendance at professional meetings or GVSU student activities when approved in advance by the Program Director
  - (5) Excused leave of absence may also be granted to individuals in extenuating circumstances as determined by the Program Director.
- d. **Personal absences** are permitted only as listed below.
- (1) Two days per term are permitted without penalty and may be made up in four hour (half day) increments with approval from the Program Director.
  - (2) Any absences exceeding the above will be considered unexcused and will result in a 5% reduction from the overall grade for each absence.
  - (3) Absences exceeding four days per term (excused and/or unexcused) requires a meeting with the Program Director to determine if continuing in the course is feasible.
- e. **Tardiness**
- (1) Tardiness is defined as arriving more than 10 minutes late or leaving 10 minutes early. Clinical Instructors may define the exact place where arrival and departure is permitted.
  - (2) Tardiness of one hour or more (late arrival or early departure) is considered an unexcused absence.
  - (3) Students are required to notify the clinical education center Clinical Instructor of tardiness the day it occurs. This notification may be made verbally to the Clinical Instructor. If the student does not see the Clinical Instructor that day, notification must be left in writing (voice mail or email).
  - (4) Students are required to notify the Program Director of tardiness within 48 hours. Notification must be left in writing via email.
  - (5) Additional corrective action will be taken for repeated tardiness as outlined below:
    - 2<sup>nd</sup> tardy per semester- verbal warning
    - 3<sup>rd</sup> tardy per semester- written warning
    - 4<sup>th</sup> tardy per semester- advising with Program Director required
    - 5<sup>th</sup> tardy per semester- failure of course with letter grade of "F"
- f. **Suspension**
- (1) Students suspended for any reason are not permitted to make up any of the time.
- g. **Strike or Other Unanticipated Limitations to Clinical Attendance**
- (1) Strikes or other unanticipated limitations to clinical attendance (such as tornadoes, other acts of God, etc.) obviously cannot be anticipated by the university.
  - (2) The university will attempt to place all students affected by a strike or other unanticipated limitation to clinical attendance at another appropriately recognized clinical education center.
  - (3) Students will not be allowed to reduce the total clinical education time due to a strike or other unanticipated limitation to clinical attendance. It is possible that students may have to make arrangements to attend clinical education during additional terms due to a strike and other unanticipated limitations to clinical attendance. All students are expected to achieve the same level of attendance in all clinical courses.

## 5. MAKE UP TIME

- a. Make-up time is permitted only as defined above.
- b. Make-up clinical time dates must be submitted to the Clinical Instructor in writing on the appropriate form in advance.
- c. Make-up time may not begin without approval of the Clinical Instructor and Program Director with appropriate documentation.

- d. Make-up time may occur any time but may not cause a student schedule to exceed 40 educational contact hours in any one week or 8 hours in any one day.
- e. Competencies and proficiencies and other grading components may be achieved only during excused make-up days with appropriate documentation.

## 6. VACATIONS AND OTHER ABSENCES

Vacations and other absences are considered unexcused and are not eligible for make-up time with competency privileges.

## E. CLINICAL EDUCATION RULES

The overall guideline for all clinical education rules is that students are expected to conduct themselves in a professional manner at all times during clinical education. These rules simply indicate the exact elements of professional behavior and conduct for GVSU students.

### 1. HEALTH COMPLIANCE

It is mandatory for all sonography students to meet all the requirements of the GVSU College of Health Professions Health Compliance Officer. This includes a physical examination, immunizations and/or titers, CPR, TB, criminal background checks, and a number of other program specific requirements. These requirements may be submitted through Blackboard. No student will be allowed to attend clinical education until all health compliance requirements are met.

### 2. CLINICAL CONDUCT

In addition to being able to follow the rules and regulations established by the clinical education center, students are also expected to follow the Society of Diagnostic Medical Sonographers Code of Ethics, cooperate with the American Hospital Association's Patients' Bill of Rights and to:

- a. Consider all aspects of the Diagnostic Medical Sonography programs in the Clinical Education Centers and all information concerning patients to be totally confidential. **THESE ASPECTS ARE NOT TO BE DISCUSSED WITH OTHER STUDENTS, FRIENDS OR FAMILY OUTSIDE OF THE CLINICAL EDUCATION CENTERS.** Violation of this professional trust will result in charges of misconduct from the university and/or may result in legal action from victims of your actions. There are severe penalties for violating patient's right to confidentiality. Students are responsible for their own actions under these laws (which include all HIPAA regulations). Students are strongly advised to adhere to generic descriptions of all patients, health care professionals, and other medical staff when completing assignments involving clinical experiences. Never use the name or a unique description of a patient or professional that is so specific it would violate their confidentiality rights.
- b. Remember that students are not permitted in hospitals or other health care institutions during non-clinical education hours unless on specific business not related to university clinical education.
- c. Avoid personal telephone calls on institutional phones except in case of emergency. Personal or public telephones are to be used for all non-institutional business. Remember that many health care institutions have specific policies about cell phones and that you are responsible to make sure your phone is turned off in those areas.
- d. No smoking, alcohol, or non-prescription stimulant or depressant substance use is permitted during clinical education. The use of prescription substances may also be restricted during clinical education courses. Check with your Program Director before attending any clinical assignments under the influence of anything. Clinical education center policies and procedures apply to these rules in addition to all university policies and procedures.
- e. Remember that your clinical education experience is designed to encourage responsibility in a professional and an ethical environment and this includes behavior such as cooperation, accepting constructive criticism, and dependability.
- f. Patterns of behavior indicating an attitude of irresponsibility to self, patient, profession, university, or clinical site may result in actions directed at dismissing a student from the program.

## 2. SOCIETY OF DIAGNOSTIC MEDICAL SONOGRAPHERS CODE OF ETHICS

### Code of Ethics for the Profession of Diagnostic Medical Sonography Approved by SDMS Board of Directors, September 29, 2004

#### **PREAMBLE**

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

#### **OBJECTIVES**

To create and encourage an environment where professional and ethical issues are discussed and addressed. To help the individual practitioner identify ethical issues. To provide guidelines for individual practitioners regarding ethical behavior.

#### **PRINCIPLES**

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

- A. Provide information to the patient about the purpose, risks, and benefits of the ultrasound procedure and respond to the patient's questions and concerns.
- B. Respect the patient's autonomy and the right to refuse the procedure.
- C. Recognize the patient's individuality and provide care in a non-judgmental and non-discriminatory manner.
- D. Promote the privacy, dignity and comfort of the patient (relatives and significant others) by thoroughly explaining procedure protocols and implementing proper draping techniques.
- E. Protect confidentiality of acquired patient information.
- F. Strive to ensure patient safety.

Principle II: To promote the highest level of competent practice. Diagnostic medical sonographers shall:

- A. Obtain appropriate ultrasound education and clinical skills to ensure competence.
- B. Achieve and maintain specialty specific ultrasound credentials. Ultrasound credentials must be awarded by a national sonography credentialing body recognized by the Society of Diagnostic medical Sonography (SDMS) Board of Directors.
- C. Uphold professional standards by adhering to defined technical protocols and diagnostic criteria established by peer review.
- D. Acknowledge personal and legal limits, practice within the defined scope of practice, and assume responsibility for his/her actions.
- E. Maintain continued competence through continuing education and/or re-certification.
- F. Perform only medically indicated studies, ordered by a physician of their designed health care provider.
- G. Protect patients and/or study subjects by adhering to oversight and approval of investigational procedures, including documented informed consent.
- H. Refrain from the use of any substances that may alter judgment or skill and thereby compromise patient care.
- I. Be accountable and participate in regular assessment and review of equipment, procedures, protocols, and results.

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

- A. Be truthful and promote appropriate and timely communications with patients, colleagues, and the public.
- B. Respect the rights of patients, colleagues, the public and yourself.

- C. Avoid conflicts of interest and situations that exploit others or misrepresent information.
- D. Accurately represent his/her level of competency, education, and certification.
- E. Promote equitable care.
- F. Collaborate with professional colleagues to create an environment that promotes communication and respect.
- G. Recognize that well-intentioned healthcare providers can find themselves in ethical dilemmas; communicate and collaborate with others in resolving ethical practice. Report deviations from the SDMS Code of Ethics for the Profession of diagnostic medical Sonography to supervisors, so that they may be addressed according to local policy and procedures.
- H. Engage in ethical billing practices.
- I. Engage only in legal arrangements in the medical industry.

### 3. THE PATIENTS BILL OF RIGHTS

This Patient's Bill of Rights was adopted by the American Hospital Association in 1992. It is designed to inform patients of their rights while in a hospital. As a sonographer who will be experiencing clinical education in several hospitals, you are obligated to respect these rights.

These rights can be exercised on the patient's behalf by a designated surrogate or proxy decision maker if the patient lacks decision-making capacity is legally incompetent, or is a minor.

- a. The patient has the right to considerate and respectful care.
- b. The patient has the right to and is encouraged to obtain from physicians and other direct caregivers relevant, current, and understandable information concerning diagnosis, treatment, and prognosis.

Except in emergencies when the patient lacks decision-making capacity and the need for treatment is urgent, the patient is entitled to the opportunity to discuss and request information related to the specific procedures and/or treatments, the risks involved, the possible length of recuperation, and the medically reasonable alternatives and their accompanying risks and benefits.

Patients have the right to know the identity of physicians, nurses, and others involved in their care, as well as when those involved are students, residents, or other trainees. The patient also has the right to know the immediate and long-term financial implications of treatment choices, insofar as they are known.

- c. The patient has the right to make decisions about the plan of care prior to and during the course of treatment and to refuse a recommended treatment or plan of care to the extent permitted by law and hospital policy and to be informed of the medical consequences of this action. In case of such refusal, the patient is entitled to other appropriate care and services that the hospital provides or transfer to another hospital. The hospital should notify patients of any policy that might affect patient choice within the institution.
- d. The patient has the right to have an advance directive such as a living will, health care proxy, or durable power of attorney for health care) concerning treatment or designating a surrogate decision maker with the expectation that the hospital will honor the intent of that directive to the extent permitted by law and the hospital policy.

Health care institutions must advise patients of their rights under state law and hospital policy to make informed medical choices, ask if the patient has an advance directive, and include that information in patient records. The patient has the right to timely information about hospital policy that may limit its ability to implement fully a legally valid advance directive.

- e. The patient has the right to every consideration of privacy. Case discussion, consultation, examination, and treatment should be conducted so as to protect each patient's privacy.
- f. The patient has the right to expect that all communications and records pertaining to his/her care will be treated as confidential by the hospital, except in cases such as suspected abuse and public health hazards when reported is permitted or required by law. The patient has the right to expect that the hospital will emphasize the confidentiality of this information when it releases it to any other parties entitled to review information in these records.
- g. The patient has the right to review the records pertaining to his/her medical care and to have the information explained or interpreted as necessary, except when restricted by law.
- h. The patient has the right to expect that, within its capacity and policies, a hospital will make reasonable response to the request of a patient for appropriate and medically indicated care and services. The hospital must provide evaluation, service, and/or referral as indicated by the urgency of the case. When medically appropriate and legally permissible, or when a patient has so requested, a patient may be transferred to another facility. The institution to which the patient is

to be transferred must first have accepted the patient for transfer. The patient must also have the benefit of complete information and explanation concerning the need for, risks, benefits, and alternatives to such transfer.

- i. The patient has the right to ask and be informed of the existence of business relationships among the hospital, educational institutions, other health care providers, or payers that may influence the patient's treatment and care.
- j. The patient has the right to consent to or decline to participate in proposed research studies or human experimentation affecting care and treatment or requiring direct patient involvement, and to have those studies fully explained prior to consent. A patient who declines to participate in research or experimentation is entitled to the most effective care that the hospital can otherwise provide.
- k. The patient has the right to expect responsible continuity of care when appropriate and to be informed by physicians and other caregivers of available and realistic patient care options when hospital care is no longer appropriate.
- l. The patient has the right to be informed of hospital policies and practices that relate to patient care, treatment, and responsibilities. The patient has the right to be informed of available resources for resolving disputes, grievances, and conflicts, such as ethics committees, patient representatives, or other mechanisms available in the institution. The patient has the right to be informed of the hospital's charges for services and available payment methods.

The collaborative nature of health care requires that patients, or their families/surrogates, participate in their care. The effectiveness of care and patient satisfaction with the course of treatment depends, in part, on the patient fulfilling certain responsibilities. Patients are responsible for providing information about past illnesses, hospitalizations, medications, and other matters related to health status. To participate effectively in decision making, patients must be encouraged to take responsibility for requesting additional information or clarification about their health status or treatment when they do not fully understand information and instructions. Patients are also responsible for ensuring that the health care institution has a copy of their written advance directive if they have one. Patients are responsible for informing their physicians and other caregivers if they anticipate problems in following prescribed treatment.

Patients should also be aware of the hospital's obligation to be reasonably efficient and equitable in providing care to other patients and the community. The hospital's rules and regulations are designed to help the hospital meet this obligation. Patients and their families are responsible for making reasonable accommodations to the needs of the hospital, other patients, medical staff, and hospital employees. Patients are responsible for providing necessary information for insurance claims and for working with the hospital to make payment arrangements, when necessary.

A person's health depends on much more than health care services. Patients are responsible for recognizing the impact of their life-style on their personal health.

#### **4. DRESS CODE**

- a. Students must adhere to each specific clinical education center's dress code policy.
- b. Students not adhering to institutional standards for dress may be removed from clinical education until their dress meets these requirements. Clinical education time lost as a result of dress code violations is considered an unexcused absence.
- c. Students must wear enclosed shoes at all times.

#### **5. GROOMING RULES**

- a. Clean and pressed clothing should be worn every day.
- b. Cosmetics and perfumes/colognes should be worn in moderation, if at all.
- c. Long hair should be tied back or put up. Facial hair should be kept neat.
- d. Loud or flashy jewelry should not be worn with the uniform at any time, and jewelry should be in moderation at all times. Jewelry that dangles or has protrusions that could harm yourself or a patient (especially delicate skin) is prohibited.
- e. Inappropriate undergarments are prohibited.
- f. As students engaged in clinical education are in close proximity with patients, acceptable personal hygiene must be maintained at all times.
- g. Students may be required to remove rings, other jewelry, or other items before being allowed into specific situations (i.e., surgery).
- h. Fingernails should be kept trim and neat with no colored nail polish.

## **6. NAME BADGES**

- a. Each student is required to wear an approved name badge stating first name and the word "Student" along with Grand Valley State University logo. Purchasing information is provided by the Clinical Coordinator. Students must purchase name badges from the vendor specified by the university.
- b. GVSU name badges are not to be worn outside of clinical education for the university.

## **7. INCIDENTS**

It is very important that hospitals have a record of all incidents in case of litigation. The prescribed format must be followed according to hospital policies for reporting incidents:

- a. An institutional incident report and an appropriate university report must be filled out immediately.
- b. A copy of the institutional incident report must be requested to be sent to the university
- c. An appropriate university report (located in this handbook) must be forwarded to the Program Director immediately.
- d. Students will be subject to corrective action for failure to follow this procedure.
- e. Significant DMS Programs incident form must be completed by a designated clinical instructor and is located in the back of this handbook.

## **8. PATIENTS WITH INFECTIOUS DISEASES**

- a. Students are required to follow the exact procedures established by our Clinical Education Centers (standard precautions, blood borne pathogen precautions, etc.) in caring for these patients.
- b. Students are required to report any contact with communicable disease in accordance with the policies of the Clinical Education Center in which the contact occurs.

## **9. STUDENTS WITH INFECTIOUS DISEASES**

Students with an infectious disease (which may include a common cold) may not attend clinical education. They should inform both the Clinical Instructor and the Program Director immediately upon diagnosis. They may not return to clinical education until a doctor's release has been presented to the Program Director. Absence due to infectious disease is considered unexcused until extenuating circumstances are granted by the Program Director.

## **10. HEALTH SERVICES**

- a. Emergency medical services will be provided by the Clinical Education Centers when needed but students are responsible for payment for all services rendered by the institution.
- b. All students must have a current GVSU physical examination form on record with the university prior to beginning clinical education.

## **11. NOTICES**

Students are responsible for all information posted to class email list servers, announced in class, or posted on the bulletin boards in the GVSU Sonography Laboratory (CHS 411).

## **12. AMBIDEXTROUS SCANNING**

Rationale: Musculoskeletal Stress Injury (MSI) is currently approaching epidemic proportions among sonographers. Current research indicates that more than 80% of sonographers are scanning with some form of pain.

Students are to scan ambidextrously in the laboratory and clinical sites.

Suggested methods include:

- Scanning with the non-dominant hand one day/week
- Scanning with the non-dominant hand 2 weeks/month
- Scanning with the non-dominant hand 5 cases/day
- Scanning with the non-dominant hand 5 cases/month

Clinical sites are requested to support this policy

## **F. INSURANCE**

### **1. MALPRACTICE**

- a. All students must be covered under a malpractice insurance policy prior to beginning clinical education.
- b. Grand Valley State University provides professional liability insurance for students while engaged in student clinical learning activities. The coverage ranges up to \$3,000,000.00 depending on the incident.
- c. Student malpractice insurance is available privately should the student desire additional coverage.
- d. The university malpractice insurance plan does not cover a student who may work in institutions outside of scheduled clinical education time.

### **2. HEALTH**

- a. Neither the Clinical Education Centers or Grand Valley State University assumes responsibility for medical expenses that may be charged to students for incidents occurring during clinical education (i.e., puncture wounds from contaminated needles, contagious diseases, etc.).
- b. It is recommended that all students obtain comprehensive personal health/accident insurance, for the duration of their program of study at Grand Valley State University.
- c. The student must inform the Health Compliance Office immediately should coverage be discontinued for any reason.
- d. If the student does not have comprehensive personal health/accident insurance, they will be prevented from participating in clinical training.

## **G. STUDENT CORRECTIVE ACTION**

To insure Clinical Education centers that students do not compromise their high standards of health care corrective actions will be enforced according to the GVSU Code and undergraduate Catalog.

### **1. DISMISSAL FROM CLINICAL EDUCATION**

- a. A student may be dismissed from clinical education immediately (with recommendations for advising or charges of misconduct forwarded to the Program Director later) by any clinical education center authority for any of the following reasons:
  - (1) Insubordination to institutional or university personnel.
  - (2) Failure to comply with the policies, rules, and regulations of the institution or university.
  - (3) Unprofessional conduct.
  - (4) Unauthorized schedule changes.
- b. Dismissal from clinical education for misconduct cannot be made up.
- c. Students may not return to clinical education until they have received permission from the Program Director.

### **2. STUDENT GRIEVANCE PROCEDURE**

- a. Students who are unsatisfied with conditions or procedures during clinical education should first use the following chain-of-command to seek redress:
  - (1) The person who caused the problem
  - (2) The sonographer who is directly supervising the student
  - (3) The Clinical Education Center Clinical Instructor
  - (4) The university Program Director
  - (5) The university Chairperson for the Department of Diagnostic & Treatment Sciences

- b. For instances where the student cannot discuss the problem with the person who caused it or when the problem is with a person who is defined as #2-4 above, the student may go to the next person on the list. However, it is considered professional and polite to inform the person in advance that you are “going over their head.” You do not need to ask their permission to do this, but it is recommended that you inform them of your intentions in advance. In cases that might be considered harassment we do not recommend informing the person causing the problem.
- c. Students who decide to file grievances must follow the guidelines and procedures of the GVSU Code and undergraduate Catalog. This provides review up through the office of the Provost.

## **H. RADIATION PROTECTION**

### **1. STATE OF MICHIGAN RADIATION PROTECTION RULES**

All policies and procedures included in the current edition of the Student Handbook for the Cardiovascular Sonography Program apply, as do the GVSU Radiation Safety Manual, and the State of Michigan Ionizing Radiation Rules.

Students in locations outside of the state of Michigan must conform to the rules and regulations of the state in which the clinical experience is located. The program will work with students in other states to assure that regulations and policies are followed as specified.

### **2. PERSONNEL MONITORING**

- a. All students in the program will wear a personnel monitoring device provided by the university at the collar at all times during clinical education. Students not having a badge may be dismissed for the day at the discretion of the faculty member or clinical instructor responsible for the instruction or clinical experience.
- b. During fluoroscopy personnel monitoring devices will be worn outside the lead apron.
- c. PERSONNEL MONITORING DEVICES ARE NOT TO BE LEFT IN HOT OR WET PLACES (i.e., dashboard of a car, pocket of a lab coat being washed, etc.)
- d. Personnel monitoring devices are to be worn only during clinical education. Students may not wear university personnel monitoring devices during outside employment for any reason.
- e. Personnel monitoring devices are to be changed according to the schedule published by the university.
- f. New personnel monitoring devices will be distributed from the office of the Program Director.
- g. Failure to change personnel monitoring devices after the 2<sup>nd</sup> class day after the published change deadline will result in corrective action.
- h. Sickness or excused absences do not relieve students of responsibility for changing personnel monitoring devices on schedule.
- i. Loss or accidental exposure of a personnel monitoring device shall be reported to the Radiation Safety Officer immediately. A telephone message shall be left the day of the incident with a written report to follow in person or by email as soon as possible.
- j. Students will be assessed for all loss of personnel monitoring device charges.
- k. Personnel monitoring reports will be made available to employers upon receipt of written release from the student/alumnus.

### **3. REPEATING IMAGES**

Students may repeat images as appropriate to the procedure.

### **4. STUDENT SUPERVISION**

Until a student achieves and documents competency in any given procedure, all clinical assignments shall be carried out under the direct supervision of qualified sonographer. The parameters of direct supervision are:

- a. A qualified cardiovascular sonographer reviews and approves all images prior to the patient leaving the institution.

After demonstrating competency, students may perform procedures with indirect supervision. Indirect supervision is defined as that supervision provided by a qualified sonographer immediately available to assist students regardless of the level of student achievement.



## 5. PREGNANCY

**IMPORTANT NOTE:** The first 3 months (1<sup>st</sup> trimester) of a pregnancy is the most critical time as far as exposure to ionizing radiation is concerned.

Any student who believes she may be pregnant may declare a pregnancy. Students also have the right to un-declare pregnancy at any time. All pregnancy declarations and un-declarations must be in writing to the radiation safety officer, must be dated and signed legibly, and shall be submitted to the program director's office.

- a. Upon declaration of pregnancy, the student is required to present to the Program Director a written statement from her physician that indicates the expected date of delivery and her fitness for clinical education. This statement shall address any concerns or limitations of physical activities during pregnancy and must be presented within the first month following diagnosis. This statement is not intended to address radiation safety issues.
- b. The student may choose to take a leave of absence during her pregnancy or she may continue with her clinical education. If the student continues her clinical education, she must present to the Program Director a written statement from her physician stating her fitness for clinical education at least every 2 months. Failure to do so will result in suspension from clinical education until all proper procedures have been followed.
- c. The student's total accumulated exposure during her pregnancy shall not exceed 0.5 rem/5 mSv (Not to exceed 50 mrem/0.5 mSv in any one month) In the event that this exposure limit is exceeded, the student shall be advised to withdraw from all clinical education for the remainder of the pregnancy. It is the student's responsibility to continually check the personnel monitoring device reports. Both the student and the Radiation Safety Officer and/or the Program Director shall initial the personnel monitoring device reports monthly to verify that they have checked the total accumulated exposure.
- d. If the student decides to continue her clinical education she will be expected to participate in all clinical assignments and/or duties.
- e. A student will be allowed to make up any clinical time missed due to pregnancy or immediate post-partum care. See attached.
- f. Made up time will be structured to compensate for loss of clinical experiences during pregnancy.
- g. Students are allowed to bank time in anticipation of missing clinical time during pregnancy.

## I. CLINICAL EVALUATION SYSTEM

Cardiovascular Sonographers must be competent in both the art and science of sonography. The Grand Valley State University Diagnostic Medical Sonography Programs will evaluate the student's skill in these arts through the Clinical Evaluation Program.

1. Students must complete all prerequisite, mandatory, and basic patient care competencies and observations prior to graduation and are strongly encouraged to complete as many proficiencies as possible.
  - a. All competencies are based on information taught during university courses.
  - b. All prerequisite and all clinical competencies listed for the individual student specialty areas of study must be completed on patients at the clinical education centers as part of the clinical education course grades. The final clinical course cannot be passed until this requirement is met.
  - c. Additional clinical activities are included in the clinical grade. These activities include, but are not limited to, proficiencies, clinical evaluation goals, and participation in clinical report.
  - d. Clinical competencies are achieved by performing procedures on patients during clinical education.
  - e. The observation and evaluation of the student's procedural skills is done by ARDMS/CCI registered sonographers who are clinical instructors, staff sonographers, or university faculty.
  - f. Students are responsible for arranging for an evaluator to be present during the procedure to carry out the observations. This is normally done by asking a qualified evaluator in advance of the procedure. Students should not expect to be evaluated on a procedure until they have demonstrated their ability to perform the procedure to an acceptable level.
  - g. All competency evaluations must be performed only by ARDMS/CCI registered sonographers who are registered in the specialty area in which the student has requested evaluation.
  - h. Student competencies may be rejected by university faculty if deemed necessary due to failure of evaluators to note errors.

- i. Students failing a clinical course (grade of C+ or less) do not accumulate clinical competencies or hours from that course toward graduation clinical requirements.
- j. When students are unable to gain reasonable access to specific mandatory competencies, a limited number of simulated competencies may be permitted through faculty evaluation in the laboratory (see clinical grading scale). Simulations are case by case basis and at discretion of the Program Director.

## **CLINICAL ADVISING PROGRAM**

- 2. Cardiovascular Sonographers must also have the ability to care for patients in a professional and ethical manner. To assist you in developing these skills the Grand Valley State University Diagnostic Medical Sonography Programs conduct a Clinical Advising Program in conjunction with clinical education.

This program is designed to assess each student's personal progress toward achieving objectives consistent with professional clinical practice. This includes behavioral affective characteristics. Each student is required to set personal goals/objectives for each semester that are approved by the Program Director.

- a. Students are required to continue to make progress toward achieving personal goals as established by the clinical advising program each term.
- b. Clinical grades are affected by advising results only when it is determined that the student has failed to make continued and regular progress toward achieving personal goals.
- c. Students may be subject to corrective actions due to failure to comply with advising suggestions. This includes failure to achieve objectives for a clinical education course, which can cause a failing grade to be issued.
- d. Students are required to complete and submit at the clinical advising session their copies of the Sonography Clinical Assessment Notebook (SCAN) document's Daily Clinical Activity Sheets. The required mandatory clinical advising competencies that are due from the SCAN document are listed below by academic term. (CA2 represents a competency due the 2<sup>nd</sup> academic term of the program-which is normally the winter semester of the junior year during the 1<sup>st</sup> clinical education course.) All evaluation sheets require the students to sign them to signify that they have seen them.

### **3. Contract for Clinical Credit**

- a. Students may contract for clinical evaluation credit when they have completed 85% of all mandatory competencies. This option is designed to encourage more advanced students to explore procedures above and beyond mandatory minimums and clinical opportunities at prominent sonography sites.

### **CLINICAL ADVISING MANDATORY COMPETENCIES (BY ACADEMIC TERM)**

Professional Quality #5 and/or Instrumentation must be completed every semester for all machines prior to initial competency/proficiency.

Adult and Pediatric Echo – Professional Qualities – Proficiency #5 Equipment analysis form

Vascular – Scan Proficiency #2 Instrumentation form

CA2.01 Environment (SCAN Professional Qualities #2)

CA2.02 Patient Management (SCAN Professional Qualities #4)

CA2.03 Sonographer Safety (SCAN Professional Qualities #9)

CA3.04 Compliance (SCAN Professional Qualities #1)

CA3.05 Patient/Sonographer Interaction (SCAN Professional Qualities #3)

CA4.06 Image Acquisition and Analysis (SCAN Professional Qualities #6)

CA4.07 Professional Interactions (SCAN Professional Qualities #8)

CA4.08 Time Management (SCAN Professional Qualities #10)

CA5.09 Personal Growth and Dev (SCAN Professional Qualities #7)

CA5.10 Additional Student Functions (SCAN Professional Qualities #11)

**4. Grades will be assigned as follows:**

<b>Passing Grades</b>		<b>Failing Grades</b>	
<b>100.0-94.0%</b>	<b>A</b>	<b>79.9-78.0%</b>	<b>C+</b>
<b>93.9-90.0%</b>	<b>A-</b>	<b>77.9-74.0%</b>	<b>C</b>
<b>89.9-88.0%</b>	<b>B+</b>	<b>73.9-70.0</b>	<b>C-</b>
<b>87.9-84.0%</b>	<b>B</b>	<b>69.9-68.0%</b>	<b>D+</b>
<b>83.9-80.0%</b>	<b>B-</b>	<b>67.9-60.0%</b>	<b>D</b>
		<b>59.9-0.0%</b>	<b>F</b>

**Grades are taken to one decimal point and are not rounded up or down.**

**Attendance**

Up to two absences are allowed per course. Unexcused absences will result in the following impact on your grade:

- A. For each additional unexcused absence, 5% will be reduced from your overall grade.
- B. Absences exceeding four days (excused and/or unexcused) requires a meeting with the program director to determine if continuing in the course is feasible.

**4a. CLINICAL GRADE SCALE FOR ADULT ECHOCARDIORAPHY AND PEDIATRIC ECHOCARDIOGRAPHY OR VASCULAR SONOGRAPHY**

Course	Class Participation	Total Course Grade Form															
		Competency Evaluations									Proficiency Evaluations						
	10%	70%	65%	60%	55%	50%	45%	40%	35%	0%	20%	18%	15%	12%	10%	5%	0%
RIE 361- Echo Clinical Education I	10%	7+	6	5	4	3	2	1	na	<1	4	3	2	1	na	na	<1
RIE 362- Echo Clinical Education II and either RIE 363 or RIE 366	10%	☆ 14+	☆ 13	☆ 12	☆ 11	10	9	8	7	<7	10+	7-9	6	4-5	2-3	na	<2
RIE 463- Ped Echo Clinic Ed II or RIE 466- Vas Sono Clinic Ed II	10%	14+	13	12	11	10	9	8	7	<7	6+	4-5	3	2	na	na	<1
RIE 464- Ped Echo Clinic Ed III or RIE 467- Vas Sono Clinic Ed III	10%	8+	7	6	5	14	3	2	1	<1	* 14+	* 12- 13	* 11	* 10	* 9	* 8	<8
	Min Comp Level				Min Comp Level								Min Comp Level				

2.01 series competencies and proficiencies are ONLY available for the RIE 300 series courses.

Heavy lines indicate minimum recommended competency level for 80% B- passing grade

The total number of competencies and proficiencies for each course are given on the course number and name line. Professional Qualities are required (see list) for each course and are not counted toward the total number of competencies and proficiencies.

- ☆ Vascular- at least one competency must pertain to vascular sonography
- Pediatric – at least two competencies must pertain to pediatric echocardiography

All specialty standards must be met in all courses for a minimum passing grade.  
 There is a limitation of 3 total proficiencies of the same type. – Echocardiography  
 There is a limitation of 3 proficiencies of the same type/semester – Vascular Sonography

NOTE: All Mandatory Competencies must be completed to receive academic credit for RIE 464 and/or 467. Students not achieving all Mandatory Competencies before the end of this course will receive an incomplete, regardless of the percentage and/or letter grade earned.

\* A minimum number of six proficiencies must pertain to vascular sonography or pediatric echocardiography

**5. DESCRIPTION OF ASSIGNMENTS AND ASSESSMENT**

- a. Each clinical education course will provide each student with an adequate number of scheduled contact hours of clinical education at a sonography critical center under the direction of a registered sonographer as part of a total of scheduled clinical education hours. Students will be required to demonstrate satisfactory clinical competence through the JRC-CVT-recommended SDMS Sonography Clinical Assessment Notebook (SCAN) competency-based clinical evaluation system.

All students are required to make the following changes to their personal SDMS Sonography Clinical Assessment Notebook (SCAN):

1. The term “proficiency” does not apply to the term “proficiency” in this GVSU Student Handbook.
2. The “Letter Grade” section of each SCAN document form is to be used as follows:
  - (a) Numbers 1-10 apply to individual procedures attempted by the student.
  - (b) Each number is to be replaced by the student with the appropriate letter as follows:  
 C= competency attempt  
 P= proficiency attempt  
 (Requires that competency has been successfully completed)
  - (c) Letters A, TD, P are not to be used

All competency and proficiency evaluations are competency-based modified mastery learning evaluations. This means you must pass ALL objectives to receive credit. There is no partial credit available. There is also no penalty for failure other than you must continue to repeat each evaluation until you pass it at 100% level at least once.

This evaluation system will include the following clinical procedures:

#### **FOR DIAGNOSTIC MEDICAL SONOGRAPHY- ECHOCARDIOGRAPHY (ADULT)**

- b. Students will perform, under indirect supervision, ALL of the following 5 Prerequisite Competencies PRIOR to attempting ANY Mandatory Competencies:
 

**PREREQUISITE CLINICAL COMPETENCIES**

  - 1.01 O2 Administration
  - 1.02 Patient Transfer
  - 1.03 Aseptic Technique
  - 1.04 CPR
  - 1.05 Vital sign (BP, pulse, resp, temp,)
- c. Students will perform, under indirect supervision, the following Prerequisite Competency PRIOR to attempting ANY Mandatory Competencies or Proficiencies at each NEW clinical education site:  
 P01 Equipment Analysis for Adult Echo (Professional Qualities #5)
- d. Students will perform, under direct supervision, ALL of the following 17 Mandatory Competencies:

#### **ADULT ECHOCARDIOGRAPHY MANDATORY COMPETENCIES**

- i. The 2.01 series competencies and proficiencies are ONLY available for the RIE 300 series courses.
  - 2.01 2D Parasternal Window (SCAN Proficiency #3)
  - 2.02 2D Apical Window (SCAN Proficiency #4)
  - 2.03 2D Subcostal Window (SCAN Proficiency #5)
  - 2.04 2D Additional Scanning Windows (SSN window) (SCAN Proficiency #6)
  - 2.05 M-Mode (SCAN Proficiency #7)
  - 2.06 Color Doppler (SCAN Proficiency #8)
  - 2.07 Spectral Doppler (SCAN Proficiency #9)
  - 2.08 Doppler Analysis (SCAN Proficiency #10)
  - 2.02 Complete Echocardiogram (SCAN Proficiency #11A)- available on Blackboard
  - 2.03 Cardiac Arrhythmias (SCAN Proficiency #11)
  - 2.04 2 (two of the 2.04 series must be done as mandatory comps)
    - 2.09 Pathology Valve Disease (SCAN Proficiency #12)
    - 2.10 Pathology Prosthetic Valve (SCAN Proficiency #13)
    - 2.11 Pathology Pericardial Disease (SCAN Proficiency #14)
    - 2.12 Pathology Right Heart Disease (SCAN Proficiency #15)
    - 2.13 Pathology LV Dysfunction (SCAN Proficiency #16)
    - 2.14 Pathology Cardiomyopathies (SCAN Proficiency #17)
    - 2.15 Pathology Cardiac Masses (SCAN Proficiency #18)
    - 2.16 Pathology Diseases of the Aorta (SCAN Proficiency #19)
  - 2.05 Adult Congenital Heart Disease (SCAN Proficiency #20)
  - \*\*2.06 Transesophageal Echocardiography (SCAN Proficiency #21)
  - \*\*2.07 Contrast Echo (SCAN Proficiency #22)
  - \*\*2.08 Stress Echocardiography with Dobutamine (SCAN Proficiency #23A)
  - \*\*2.9 Stress Echocardiography with exercise (SCAN Proficiency #23)

#### **\*\*APPLICABLE OPTIONS FOR EXERCISE STRESS ECHOCARDIOGRAPHY ONLY IF THE STUDY CANNOT BE COMPLETED IN THE TYPICAL METHOD,**

1. Obtain post exercise echocardiographic images on patients within 90 seconds of the sonographer completing the images. This is considered post scanning.
2. Simulation request in the final semester as outlined in this handbook. This is the least preferred option.

- j. Students may perform, under direct supervision, any of the following 12 Optional Competencies:

**ADULTS ECHOCARDIOGRAPHY OPTIONAL COMPETENCIES**

- 3.01 Intracardiac Echocardiogram (ICE) (SCAN Proficiency #25)
- 3.02 Surgery (SCAN Proficiency #26)
- 3.03.01 Pathology Valve Disease (SCAN Proficiency #12)
- 3.03.02 Pathology Prosthetic Valve (SCAN Proficiency #13)
- 3.03.03 Pathology Pericardial Disease (SCAN Proficiency #14)
- 3.03.04 Pathology Right Heart Disease (SCAN Proficiency #15)
- 3.03.05 Pathology LV Dysfunction (SCAN Proficiency #16)
- 3.03.06 Pathology Cardiomyopathies (SCAN Proficiency #17)
- 3.03.07 Pathology Cardiac Masses (SCAN Proficiency #18)
- 3.03.08 Pathology Diseases of the Aorta (SCAN Proficiency #19)
- 3.03.09 Adult Congenital Heart Disease (SCAN Proficiency #30)
- 3.04 Transesophageal Echocardiography with Dobutamine (SCAN Proficiency #24)

- k. **There is a limitation of a total of 3 proficiencies of the same type. –Echocardiography**

**FOR DIAGNOSTIC MEDICAL SONOGRAPHY- ECHOCARDIOGRAPHY (PEDIATRIC)**

- i. Students will perform, under indirect supervision, the following Prerequisite Competency PRIOR to attempting ANY Mandatory Competencies at each NEW clinical education site:

P02 Pediatric Echo Prep and Patient Care (Professional Qualities #1)

- m. Students enrolled in the pediatric echocardiography course sequence will perform, under direct supervision, ALL of the following 6 Mandatory Competencies:

**PEDIATRIC ECHOCARDIOGRAPHY MANDATORY COMPETENCIES**

- 4.01.01 Parasternal Window (SCAN Proficiency #3)
- 4.01.02 Apical Window (SCAN Proficiency #4)
- 4.01.03 Subcostal Window (SCAN Proficiency #5)
- 4.01.04 Suprasternal Window (SCAN Proficiency #6)
- 4.01.05 Spectral Doppler Measurements (SCAN Proficiency #7)
- 4.01.06 Full Pediatric Echocardiogram (SCAN Proficiency #7A)

- n. Students in the pediatric echocardiography course sequence may perform, under direct supervision, any of the following 20 Optional Competencies:

**PEDIATRIC ECHOCARDIOGRAPHY OPTIONAL COMPETENCIES**

- 5.01 Cardiac Malposition (SCAN Proficiency #8)
- 5.02 Patent Ductus Arteriosus (SCAN Proficiency #9)
- 5.03 Atrial Septal Defects (SCAN Proficiency #10)
- 5.04 Ventricular Septal Defects (SCAN Proficiency #11)
- 5.05 Abnormal Cardiac Veins (SCAN Proficiency #12)
- 5.06 Hypoplastic Left Heart Syndrome (SCAN Proficiency #13)
- 5.07 Abnormal Aortic Arch (SCAN Proficiency #14)
- 5.08 Abnormal Systematic Venous Return (SCAN Proficiency #15)
- 5.09 Ebstein's Anomaly (SCAN Proficiency #16)
- 5.10 Tetralogy of Fallot (SCAN Proficiency #17)
- 5.11 Transposition of the Great Arteries (SCAN Proficiency #18)
- 5.12 Truncus Arteriosus (SCAN Proficiency #19)
- 5.13 Pulmonary Atresia with Intact Ventricular Septum (SCAN Proficiency #20)
- 5.14 Total Anomalous Pulmonary Return (SCAN Proficiency #21)
- 5.15 Persistent Pulmonary Hypertension of the Newborn (Persistent Fetal Circulation) (SCAN Proficiency #22)
- 5.16 Tricuspid Atresia (SCAN Proficiency #23)
- 5.17 Cyanotic Lesions (SCAN Proficiency #24)
- 5.18 Miscellaneous- Congenital Anomalies (SCAN Proficiency #25)
- 5.19 Miscellaneous- Acquired Disease (SCAN Proficiency #26)
- 5.20 Postoperative Evaluation (SCAN Proficiency #27)

**FOR DIAGNOSTIC MEDICAL SONOGRAPHY – VASCULAR**

- o. Students will perform, under indirect supervision, the following Prerequisite Competency PRIOR to attempting ANY Mandatory Competencies or Proficiencies at each NEW clinical education site:

P01 Vascular - (P1 Equivalent) **Scan** Proficiency #2 Instrumentation:  
Both Duplex and Indirect (physiological) equipment.

- p. Students enrolled in the vascular sonography course sequence will perform, under direct supervision, ALL of the following 4 Mandatory Competencies:

**VASCULAR SONOGRAPHY MANDATORY COMPETENCIES**

- \*\* 6.0 Abdominal Doppler (SCAN Proficiency #3) any **one** of the following (6.01-03)
- 6.01 – Aortoiliac Duplex
  - 6.02 – Renal Artery Duplex

- 6.03 - Mesenteric Artery Duplex
- 6.1 Arterial Lower Extremity – Indirect Testing (SCAN Proficiency #5)
- 6.2 Carotid (SCAN Proficiency #8)
- 6.3 Venous Lower Extremity (SCAN Proficiency #11)

q. <sup>\*\*</sup> Students in the vascular sonography course sequence may perform, under direct supervision, any of the following 29 Optional Competencies:

**VASCULAR SONOGRAPHY OPTIONAL COMPETENCIES**

- 6.0 Abdominal Doppler (SCAN Proficiency #3) any of the following (6.01-03) that have not been completed as a Mandatory Competency may be used as an optional.
  - 6.01 – Aortoiliac Duplex
  - 6.02 – Renal Artery Duplex
  - 6.03 - Mesenteric Artery Duplex
- 7.01 Arterial Lower Extremity – Direct Testing (SCAN Proficiency #4)
- 7.02 Arterial Upper Extremity – Direct Testing (SCAN Proficiency #6)
- 7.03 Arterial Upper Extremity – Indirect Testing (SCAN Proficiency #7)
- 7.04 Grafts Hemodialysis (SCAN Proficiency #9)
- 7.05 Grafts Peripheral (SCAN Proficiency #10)
- 7.06 Venous Upper Extremity (SCAN Proficiency #12)
  
- 7.07 Venous Valve Incompetence (SCAN Proficiency #13)
- 7.08 Lower Extremity Venous Mapping (SCAN Proficiency #14)
- 7.09 Penile Sonography (SCAN Proficiency #15)
- 7.10 Transcranial Doppler (SCAN Proficiency #16)
- 7.11 Radial Artery Assessment for Coronary Artery Bypass Grafting (CABG)
- 7.12 Pseudoaneurysm Identification with Compression Treatment
- 7.13 Stress Testing For Cold Sensitivity
- 7.14 Upper Extremity Vein Mapping For Placement of Dialysis Access
- 7.15 Upper Extremity Vein Mapping For Peripheral Arterial Bypass Graft or for Coronary Artery Bypass Grafting
- 7.16 Indirect Lower Extremity Arterial Testing With Exercised
- 7.17 Noninvasive Evaluation for Thoracic Outlet Syndrome
- 7.18 Ultrasound Guided Venous Interventional Procedure
- 7.19 Ultrasound Guided Thrombolytic Injection
- 7.20 Popliteal Aneurysm
- 7.21 Femoral Aneurysm
- 7.22 Subclavian Artery Aneurysm
- 7.23 Radial Artery Aneurysm
- 7.24 Ulnar Artery Aneurysm
- 7.25 Peripheral Artery Pseudoaneurysm
- 7.26 Baker cyst evaluation
  
- 7.27 Two of the following (in any combination) must be completed for credit towards ONE competency
  - 7.27.01 Screening for Abdominal Aortic Aneurysm
  - 7.27.02 Ankle-Brachial Indices (ABI)
  - 7.27.03 Screening For Carotid Stenosis

r. **There is a limitation of 3 proficiencies of the same type/semester – Vascular Sonography**

s. **CLINICAL COURSE SYLLABI – Notification**

Clinical Course Syllabi are not included in this document.

Clinical Course Syllabi are provided to each student at the beginning of each clinical course.

CLINICAL ADVISING PROGRAM SONOGRAPHER EVALUATION

Date \_\_\_\_\_

 \_\_\_\_\_  
 Clinical Education Center

 \_\_\_\_\_  
 Course #

 \_\_\_\_\_  
 Semester & Year

 \_\_\_\_\_  
 Student Name

**INSTRUCTIONS:** Please rate the student in the following categories by checking inside the appropriate box. These forms are anonymous. Students will see a typed compilation of all evaluations, not your individual evaluation form. We appreciate honest and candid responses as they are essential to the students' professional growth. **DO NOT COMPLETE THIS FORM UNLESS YOU HAVE WORKED WITH THE STUDENT!**

<b>1. PROFESSIONAL CONDUCT</b>	
mannerisms, cleanliness, neatness	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>2. ATTITUDE</b>	
enthusiasm for profession interest in assigned activities	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>3. COMMUNICATION SKILLS</b>	
interpersonal skill c/ patients	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
interpersonal skill c/ staff	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>4. PATIENT CARE SKILLS</b>	
awareness of emotions, modesty	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>5. COOPERATION</b>	
willingness to assume duties	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>6. DEPENDABILITY</b>	
punctuality & reliability	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>7. SELF-CONFIDENCE</b>	
confidence in personal ability	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>8. APPLICATION OF KNOWLEDGE</b>	
use of academic information	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>9. ORGANIZATION OF DUTIES</b>	
logical & efficient performance	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	
<b>10. ADAPTABILITY</b>	
achievement of routine procedures on non-routine patients, assist patient promptly following procedure	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Comments:	

Please use the back of this form to provide additional commentary you believe could be useful in improving the educational experience of this student.

EVALUATORS ARE NOT TO SIGN THIS FORM

STUDENT IS TO SIGN BELOW ONLY FOR THE COMPILATION COPY (Not individual sonographer evaluation form) I have reviewed this evaluation and have had the opportunity for discussion. STUDENT \_\_\_\_\_





CLINICAL ADVISING PROGRAM STUDENT SELF EVALUATION

Date \_\_\_\_\_

\_\_\_\_\_  
 Clinical Education Center                      Course #                      Semester & Year                      Student Name

**INSTRUCTIONS:** As students, you are constantly evaluated by your instructors in order to monitor your progress during clinical education. However, it is important that your instructor also hear how you perceive your experience and ability. This evaluation asks you to candidly discuss your current progress. Please check the appropriate columns which best describes your feelings about your level of proficiency at this point in your education.

Rate your abilities in each of the following areas:

<b>1. PROFESSIONAL CONDUCT</b>			
mannerisms, cleanliness, neatness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>2. ATTITUDE</b>			
enthusiasm for profession interest in assigned activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>3. COMMUNICATION SKILLS</b>			
interpersonal skill c/ patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
interpersonal skill c/ staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>4. PATIENT CARE SKILLS</b>			
awareness of emotions, modesty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>5. COOPERATION</b>			
willingness to assume duties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>6. DEPENDABILITY</b>			
punctuality & reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>7. SELF-CONFIDENCE</b>			
confidence in personal ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>8. APPLICATION OF KNOWLEDGE</b>			
use of academic information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>9. ORGANIZATION OF DUTIES</b>			
logical & efficient performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
<b>10. ADAPTABILITY</b>			
achievement of routine procedures on non-routine patients, assist patient promptly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
following procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair
Comments:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excellent	Good	Fair

11. Place an "X" on the line to rate your overall professional ability at this point in your education:

\_\_\_\_\_  
Excellent      good              average              fair              poor

12. List the procedures you require the most help with:

- 
- 

13. In the space below, list the procedures or situation you find most difficult:

14. In the space below explain the progress you have made in achieving the goals you set at your last self-evaluation. Attach any required documentation.

15. GOALS:

ALL GOALS MET FORM PREVIOUS TERM

Yes    No

In the space below list at least one measurable goal that you wish to set for yourself for next term:

GOAL #1 MET

Yes    No

GOAL #2 MET

Yes    No

GOAL #3 MET

Yes    No

GOAL #4 MET

Yes    No

Please add any additional comments which you deem important (e.g., disagreements with this or other evaluations, clinical assignments, etc.):

Signature of Faculty Clinical Advisor \_\_\_\_\_

I have reviewed this evaluation and have had opportunity for discussion.

Student \_\_\_\_\_



**INDEPENDENT STUDY COURSE AGREEMENT**

Independent study courses are available in 1, 2, and 3 credit options. You may propose any topic relevant to the study of medical imaging and radiation sciences but must have this form completed and signed by the faculty member responsible for your course grade. You should expect to propose approximately 42 hours of activity for 3 each academic credit. This is based on a 14 week semester expectation of a didactic course meeting 1 hour per week per credit plus 2 hours per week of preparation and study.

Date	Course #	Semester & Year	Student Name
------	----------	-----------------	--------------

I propose the following for \_\_\_\_\_ academic credits with RIS faculty member

The title of my independent study is:

List each activity and approximate number of hours you plan to devote to achieve your objective/s.

Hours	Activity
-------	----------

I realize I must acquire the signature of a faculty member on this form and in addition, must register for the appropriate course before this proposal can be completed.

Student \_\_\_\_\_

Upon satisfactory completion of the above proposal, I will award a grade appropriate for this course.

Signature of Faculty \_\_\_\_\_

**CLINICAL EDUCATION ATTENDANCE RECORD**

 \_\_\_\_\_  
 Name of Student

 \_\_\_\_\_  
 Clinical Education Center

GVSU Policies and Procedures include:

- Time of arrival and time of departure must be recorded accurately.
- Initials to verify students arrival and departure is required by the clinical instructor or appropriate personnel
- Falsification of time records is considered cheating and is breach of university and professional ethics and will merit appropriate disciplinary action.

Day (DD-MM-YY)	Arrival Time/ Sonographers Initials	Departure Time/ Sonographers Initials	Students Initials

**Advanced Placement Agreement:**

The GVSU B.S. degrees with a major in:

Diagnostic Medical Sonography – General (Abdominal and Obstetrics-Gynecology)

or

Adult Echocardiography and Pediatric Echocardiography

or

Adult Echocardiography and Vascular Sonography

are available by advanced placement to ARDMS registered graduates of other diagnostic medical sonography programs located in regionally accredited institutions. GVSU will attempt to transfer the maximum number of academic credit hours based on currently existing university policies and procedures.

Students accepting this option are required to sign a statement of understanding as follows:

I understand that upon admission to one of the GVSU Diagnostic Medical Sonography emphases, I may become eligible for the national examinations of the American Registry of Diagnostic Medical Sonographers (ARDMS) based on GVSU's documentation of 1680 hours of ultrasound education (which includes didactic, laboratory, and clinical education contact hours). I also realize that ARDMS has notified GVSU that this eligibility may be rescinded if the students discontinues progress toward the B.S. degree at any point. I am aware that rescinded examinations may require me to repeat the entire ultrasound program experience to meet ARDMS eligibility requirements.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Witness \_\_\_\_\_ Date \_\_\_\_\_

**CONTRACT FOR CLINICAL CREDIT**

After 85% of mandatory clinical competencies have been completed, a student may propose any topic relevant to the study of radiological and imaging sciences for competency and/or proficiency credit. You must have this form completed and signed by the faculty member responsible for your course grade.

\_\_\_\_\_

Date	Course #	Semester & Year	Student Name
------	----------	-----------------	--------------

I propose the following for \_\_\_\_\_ competency credits and/or \_\_\_\_\_ proficiency credits with RIS faculty member

My proposal for Clinical Credit is:

List each activity and approximate number of hours you plan to devote to achieving your objective/s.

Hours	Activity
-------	----------

**I realize I must acquire the signature of a faculty member on this form and in addition, must register for the appropriate course before this proposal can be completed.**

**Student** \_\_\_\_\_

**Upon satisfactory completion of the above proposal, I will award a grade appropriate for this course.**

**Signature of Faculty** \_\_\_\_\_

**GRAND VALLEY STATE UNIVERSITY**  
**Diagnostic Medical Sonography Programs**  
**Significant INCIDENT / INJURY REPORT FORM**

**STUDENT**

Last Name		First Name	
Date of Birth		Social Security Number	
Street Address			
City	Zip	Phone:	

**INCIDENT/INJURY**

Date of incident	Date reported	Course in which injury occurred
Place of incident		Type of injury ('strain', 'cut', etc.)
Describe how incident/injury happened		
Names of witnesses		
Name of doctor (if known)		
Signature		Date

**INSTRUCTOR'S REPORT**

What caused this accident? (please be explicit)	
How was the injury treated? Or how was the incident addressed?	
How can a recurrence be prevented?	
Has preventative action been taken? If no', please explain	Has a report been completed at the institution where the incidence occurred?
Comments by student regarding injury or incident	
Signature	Date



**DMS: Echocardiography & Vascular Sonography Program**  
**Katelyn Lowman, BS, RDCS (AE)(PE)**  
**Jennifer VanderPoel, MEd, RDCS, RVT**  
Center for Health Sciences, College of Health Professions, Suite 164  
301 Michigan Street NE, Grand Rapids, Michigan 49503

Record of ARDMS/CCI registered Sonographers Signatures

Student Name: \_\_\_\_\_

Clinical Education Center Sonographers: \_\_\_\_\_

Each sonographer must print and sign this form once per term for comparison with the SCAN documentation. Only names on this list will be considered for competencies and proficiencies on the SCAN document. Due to accreditation requirements, approval of competencies and proficiencies are limited to CCI/ARDMS registered sonographers. Competencies will be granted by sonographers that are credentialed in each specific area, (i.e. liver competency granted by an abdominal registered sonographer).

Printed Name of the Sonographer	Signature of the Sonographer	Initials of the Sonographer





Clinical Site Evaluation **Clinical Site:** \_\_\_\_\_ **Term:** \_\_\_\_\_

**INSTRUCTION:** Before completing this form, give an honest and candid answer to this question:  
 Did I make every possible effort to take advantage of the educational opportunities available during this rotation?

ABSOLUTELY  POSSIBLY NOT

All results are given to the clinical sites so that you cannot be personally identified. Honest and candid answers will be most helpful. **DO NOT SIGN YOUR NAME TO THIS EVALUATION.**

<b>REGARDING THE SONOGRAOHER/S</b> I believe they made every attempt to:	Strongly Agree	Agree	Disagree	Strongly Disagree
1. recognize that my role was primarily to learn with the resulting service being secondary in nature				
2. show a positive attitude toward all students				
3. encourage and answer my questions				
4. ask me questions that helped me think and learn				
5. point out alternative methods for me to accomplish a task				
6. permit me to correct my own mistakes				
7. allow me to do things on my own				
8. encourage me to perform at an appropriate level of confidence				
9. assist me in finding answers to my questions				
10. discuss my performance with me				
11. permit me to do as many patients as my skill level would permit				
12. evaluate me according to my clinical experience				
13. display professionalism				
14. is a professional role model for me				
<b>REGARDING THE RADIOLOGISTS/PHYSICIANS</b> I believe they made every attempt to:				
1. recognize that my role was primarily to learn with the resulting service being secondary in nature				
2. encourage and answer my questions				
3. ask me questions that helped me think and learn				
4. point out alternative methods for me to accomplish a task				
5. permitted me to correct my own mistakes				
6. allow me to do things on my own				
<b>REGARDING MY PERSONAL FEELINGS</b> As a result of this rotation, I now am:				
1. more advanced in clinical knowledge due to clinical experience at the affiliate				
2. more interested in sonography as a profession				

Please add any additional comments on the back of this form:

## CLINICAL INSTRUCTOR EVALUATION

The student is requested to complete this form after they have finished a clinical rotation. These remain anonymous and then all evaluations are sent to the respective clinical sites at the completion of the students university experience.

The purpose of this questionnaire is to evaluate the clinical instructor. Please be objective when considering your responses to these questions. Please read each statement and rate your response using a 1 to 5 scale, with 5 = strongly agree, 4 = agree, 3 = no opinion, 2 = disagree, 1 = strongly disagree.

Clinical Instructor: \_\_\_\_\_

Clinical Site: \_\_\_\_\_

1. Helps me to apply classroom knowledge to the clinical situation.	1	2	3	4	5
2. Is willing to provide clinical supervision and guidance as required by the student handbook.	1	2	3	4	5
3. Discusses my performance with me, if necessary.	1	2	3	4	5
4. Corrects me in a constructive and professional manner when necessary.	1	2	3	4	5
5. Appears interested in me and my learning experience.	1	2	3	4	5
6. Is a professional role model for me.	1	2	3	4	5
7. Helps me develop my problem-solving skills.	1	2	3	4	5
8. Encourages me to perform at an appropriate level of confidence.	1	2	3	4	5
9. Evaluates me according to my clinical performance.	1	2	3	4	5
10. Available for assistance when needed.	1	2	3	4	5
11. Assists me in finding answers to my questions.	1	2	3	4	5

Comments:

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**Request for *additional* clinical hours**

I \_\_\_\_\_ approve \_\_\_\_\_ to attend clinical at  
(Clinical Instructor) (Name of student)

\_\_\_\_\_ on the date of \_\_\_\_\_. It is understood  
(Clinical site)

that these hours are outside of the scheduled clinical education hours and the student is not eligible for competencies or proficiencies during this time.

**Date of submission to GVSU faculty:** \_\_\_\_\_

\_\_\_\_\_  
**Signature of Clinical Instructor**

\_\_\_\_\_  
**Signature of Student**

\_\_\_\_\_  
**Signature of faculty**

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**Request for make-up clinical hours**

I \_\_\_\_\_ approve \_\_\_\_\_ to attend clinical at  
(Clinical Instructor) (Name of student)

\_\_\_\_\_ on the date of \_\_\_\_\_. It is understood  
(Clinical site)

that these hours are to make up for an excused absence and therefore the student is eligible for competencies and/or proficiencies during this time.

**Date of submission to GVSU faculty:** \_\_\_\_\_

\_\_\_\_\_  
**Signature of Clinical Instructor**

\_\_\_\_\_  
**Signature of Student**

\_\_\_\_\_  
**Signature of faculty**