WVUMedicine

West Virginia University Hospitals

Imaging Science Education Programs
Diagnostic Medical Sonography

Clinic Handbook

2025-2026 Academic year

1 Medical Center Drive
Morgantown, WV 26506

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PREFACE

WVU Hospitals offers an 18-month, 40-hour-per-week education program in Diagnostic Medical Sonography. It is designed to provide students with the basic knowledge and principles necessary to perform sonographic procedures in the clinical setting. The program is hospital-based and is accredited by The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The essentials and guidelines for accreditation are available to students to read and may be found in the office of the Program Director.

WVU Hospitals awards a certificate to each student who satisfactorily completes all courses of study and fulfills all clinical requirements of the program. Upon graduation, students are eligible to sit for several registry exams offered by the American Registry of Diagnostic Medical Sonographers. In addition, students are also eligible to sit for the certification exam in Sonography held by the American Registry of Radiologic Technologists. One stipulation beginning in January of 2015 is that for a student to be eligible to take the ARRT Sonography Exam, the student must hold an academic degree of an associate degree or higher will be mandatory.

Students enrolled in the program are regarded as mature, responsible individuals seeking education in the field of ultrasound. They are not considered employees of the hospital or students of West Virginia University.

The following information has been prepared to inform the students of both policies and procedures of the ultrasound facilities as well as the didactic and clinical requirements expected of them during this educational endeavor.

Medical Director: Dr. Cara Lombard **Ultrasound Education Coordinator: Kathleen Riley**

Mission Statement

The Diagnostic Medical Sonography education program at West Virginia University Hospitals aims to train entry-level diagnostic medical sonographers through a comprehensive curriculum that includes both theoretical and clinical education. Additionally, this program focuses on equipping students with the essential skills needed for professional development and career progression in the imaging sciences.

With an emphasis on ongoing technological advancements and a strong commitment to medical education, West Virginia University Hospitals provides a solid foundation for students to enhance and refine their imaging skills in the field of diagnostic medical sonography.

Goals

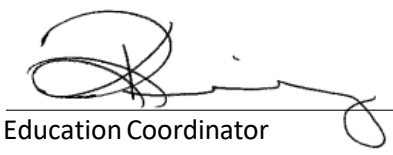
1. To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the Abdominal sonography - Extended and Obstetrics and Gynecology sonography concentrations.

2. The sonography student will practice effective communication skills.

3. The sonography student will utilize critical thinking/problem-solving skills.

4. The sonography student will exhibit professional behavior.

5. The sonography student will integrate professional growth and development practices.



Education Coordinator _____ Date _____

Policy Change

The administration of the West Virginia University Hospitals and the Faculty of the West Virginia University Hospital's Program of Imaging Science reserves the right to change any of the stated policies as necessary and/or when advisable for improvement of or to meet new standards within the program.

Kathleen Riley

Education Coordinator _____ Date _____

Clinical Education Make-up Policy

POLICY:

This policy serves to identify the procedure and criteria for making up clinical education when absences in excess of the allotted nine days of personal time off (PTO) occur. Absences in excess of the nine days must be made up by the student in order to complete the clinical education component of their education and receive the recommendation of the Education Coordinator/Program Director to sit for the registry in diagnostic medical sonography.

The following guidelines will be utilized by the student to re-establish their good standing in the clinical education component of their education.

a. The student may convert compensation time to account for excess personal leave, or
b. The student's clinical education will be extended beyond graduation to account for the number of days or hours in excess of the allotted nine personal leave days not to exceed five days.
c. In all cases, unexcused absences must be made up after graduation.

These guidelines will be used by the education program to provide the student with a mechanism to complete their clinical education when the student's attendance has been affected by adverse circumstances (ex: extended illness). Chronic attendance problems will be governed by the Attendance and Disciplinary Action policies.

Kathleen Riley
Program Director/Education Coordinator

Criteria for a volunteer in scan lab

Scope:
Volunteers are a necessary part of a thriving program to give the diagnostic medical sonography students a relaxed, hands-on environment for increasing their skills and knowledge a sonographer.

Purpose:
This policy is to describe the criteria that must be met for a person to be considered as a volunteer subject for the Diagnostic Medical Sonography education program.

Criteria:

1. If the patient is pregnant:
    a. They must be at least 10 weeks along and have had an official viability scan ordered by their physician.
    b. They must present a diagnostic report of this scan at their initial scan lab session.
    c. They should have no current symptoms of vaginal bleeding, active labor, or dizziness.
2. For all prospective scan lab subjects:
    a. They must sign the scan lab consent form.
    b. They must be free of symptoms of infection. Including but not limited to fever or chills, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, or sore throat.
    c. Subjects have the right to verbally withdraw consent to participate before or during this scan lab.

Procedure:
Scan labs are not intended to be diagnostic exams; thus, no written or verbal reporting will be provided to the subject by the student, faculty, supervising sonographer or radiologist/physician.

The supervising sonographer shall be guided by what he/she knows or reasonably should know to be informational needs of the scan lab practice patient and disclosure of said information will depend upon the existence and materiality of that information with respect to potential medical conditions/treatment. Scan lab patients may be urged to seek a physician order for a formal exam and report in situations where the supervising faculty feels findings are significant and worthy of follow-up.

Following image review with the supervising instructor, resulting scan lab images are deleted from local and network image storage, thus no scan lab documentation is retained by program faculty or the institution

Kathleen Riley
Program Director/Education Coordinator

West Virginia University Hospitals
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(304) 598-4251

Imaging Science Education Programs
Diagnostic Medical Sonography

Learning Anatomy with Ultrasound

Consent Form for Volunteer Models for Ultrasound Examination

I have read the information sheet that accompanies this consent form. I understand the objectives of the learning exercise and what is required of me. I acknowledge I have been informed that:

- ☐ My participation in this teaching activity is entirely voluntary.
- ☐ I can request additional information or ask questions at any time.
- ☐ I am free to withdraw from this exercise at any time without any disadvantage.
- ☐ All images acquired and archived will not contain personal identification information.
- ☐ There is no discomfort from the procedure, and international consensus is that there is no risk from the procedure.
- ☐ There is no financial compensation for taking part in this teaching session.
- ☐ This is not an official diagnostic test, and the images obtained will not be reviewed by a radiologist.
- ☐ No official report of findings will be generated; therefore, the acquired images cannot be used for further medical treatment or diagnosis.
- ☐ I will be informed of any potential abnormal findings identified; however, it will be my responsibility to seek appropriate medical services if required.

By Signing Below:
I agree to take part as a model for the ultrasound examination, and I release WVU Medicine, its affiliates, and their respective directors, officers, employees, and agents from any liability for damages, injuries, or diagnostic findings relative to my participation.

Signature: ……. Date……

Printed Name: ……

Supervising sonographer signature: …… Date: _____

Clinical Procedure and Supervision Policy

Policy:

The WVUH Ultrasound section is accredited as a sponsoring institution for WVUH Diagnostic Medical Sonography Education Program. In regards to this accreditation, the ultrasound section assumes the responsibility to provide each student with a volume and variety of sonographic procedures, equipment, and personnel available for educational purposes. In compliance with the Commission on Accreditation of Allied Health Programs, the number of students assigned to each clinical instructor/staff sonographer will not exceed a one-to-one ratio.

Procedures:

1. Students in the clinical setting must maintain a professional attitude, appropriate behavior, work ethic, and appearance at all times. This is a fundamental expectation of the Sonography Profession, as well as the Education Program. Each student is expected to be at their clinical site in proper uniform and ready to scan at the time their clinical assignment begins.
2. At no time will a student (unqualified) sonographer perform an examination in lieu of a staff sonographer.
3. A staff sonographer will be responsible for any and all actions of a student under their direct and indirect supervision.
4. As the student progresses through the program and documents competency for a particular exam, the clinical instruction will become more indirect to allow the student time to perfect their scanning skills and gain confidence. A qualified staff sonographer will always perform the following:
    a. Review exam request in relation to the student's level of clinical competence.
    b. Evaluate patient condition in relation to the student's level of clinical competence.
    c. Be present during the performance of the examination to offer scanning techniques and tips to assist the student sonographer if needed.
    d. Review and approve all images.
    e. Be present during case presentation to diagnosing/interpreting physician.

Direct Supervision

The student will perform an imaging study with the assigned sonographer; both student and sonographer will scan the patient. The sonographer will be present in the exam room for the entire length of the exam. The sonographer will be present to assist the student at all times. The sonographer is ultimately responsible for the exam.

Indirect Supervision

The student will perform an imaging study with the assigned sonographer; both student and sonographer will scan the patient. The sonographer may not be present in the exam room for the

entire length of the study; however, the sonographer will be immediately available to assist the student. The sonographer is ultimately responsible for the exam.

a. Immediately available is interpreted as the presence of a sonographer adjacent to the room or location where the sonogram is being performed.

Clinical Instructor

A Clinical Instructor is defined as a credentialed sonographer that provides the appropriate clinical supervision and is responsible for completing the student's clinical evaluation. An appropriately credentialed Clinical Instructor may perform competency/proficiency exams with students. The image review, discussion questions, and final approval of the competency are reserved for the Program Coordinator. Clinical Instructor responsibilities include, but are not limited to, providing demonstration of department functions, the imaging process, scanning techniques, instrumentation, normal anatomy, and pathology. Each student will be assigned to a Clinical Instructor for a period of one/two weeks. A Clinical Instructor will observe and practice the following:

1. Instruct and assist each student in the accomplishment of required sonographic procedures.
2. Support educational program mission and goals.
3. Provide feedback on student's clinical performance in order to develop student competence via evaluations and verbal communication.
4. Participate during Clinical Instructor meetings to discuss improvements of the education program in an effort to enhance student's educational experience.
5. Perform in a manner representative of the Profession and the Institution.

Communication Channel

Trajecsys is accessible to the staff sonographer. Documented proficiencies, competency examinations, student schedules, and evaluations are located within this electronic system. It is the student's responsibility to comment on each evaluation to verify they have reviewed it.

Scanning Practice

Scanning practice may only occur when appropriate clinical supervision is available.

Under No Provisions will the following examinations be performed under indirect supervision. Direct supervision guidelines will be followed regardless of the student's level of clinical competence:

1. Mobile Examinations
2. OR Examinations
3. Special Procedures
4. Invasive Procedures (including, but not limited to, endocavity and biopsy exams.

Kathleen Riley

Education Coordinator Date

West Virginia University Hospitals
Medical Center Drive
Morgantown, WV 26506
304-598-4187

IMAGING SCIENCE EDUCATION PROGRAMS
Diagnostic Medical Sonography

EXAM COMPETENCY FAQ:

These rules are taken directly from the CAAHEP standards

Definitions:

Proficiency – May be demonstrated in a clinical setting or a simulated environment
Competency – Must be completed in a clinical setting

- For all competencies and proficiencies:
  - The department protocol should be followed.
  - The student should be able to answer all questions from the sonographer about anatomy, pathology, image improvement, protocols, clinical information, and anything else directly related to the exam.
- *Once a student has completed the competency or proficiency, they should be able to perform the exam with minimal assistance*

Adult Kidneys
- Complete the scan lab assessment
- Competency

Pediatric kidneys
- Competency

Thyroid
- Complete the scan lab assessment
- competency

Right upper quadrant
- Complete the scan lab assessment
- Competency

Spleen
- Complete the scan lab assessment
- Competency

Chest
- Competency
- The lung and pleura should be included

Complete Abdomen
- Competency

Biopsy
- Competency
- Any ultrasound-guided procedure works here.
- The student should be able to demonstrate knowledge in these specific areas:
  - Sterile setup
  - Procedural time-out
  - Pre- and post-procedural documentation
  - Informed consent
  - Transducer guidance

Scrotum

- Competency

GI Tract

- **Proficiency**
- There is no guidance from CAAHEP about a specific part of the GI Tract, so any exam that evaluates some part of the GI tract qualifies

Abdominal Doppler

- **Proficiency**
- The specifications for this exam are abdominal vascular Doppler assessment of hepatic, mesenteric, and renal arteries.

Neonatal Head

- Competency

Breast

- Competency

TA Pelvis

- Competency
- Vagina, cervix, uterus, post and ant cul-de-sac, adnexa, ovaries, and fallopian tubes are required in either a TAS or TVS scan. A TVS is a more comprehensive way to obtain this anatomy.

TV Pelvis

- Competency
- Visualization of vagina, cervix, uterus, post and ant cul-de-sac, adnexa, ovaries, and fallopian tubes are required in either a TAS or TVS scan. A TVS is a more comprehensive way to obtain this anatomy.

Fetal 1st trimester

- Competency
- Visualize gest. sac, embryonic pole, yolk sac, fetal cardiac activity, placenta, uterus, cervix, adnexa, cul-de-sacs.
  - Separate images of the uterus, cervix, or cul-de-sacs if they are included in other images. The student, however, should recognize their structure and if they are within normal limits.

Fetal Second trimester – growth and anatomy

- Competency
- **Anatomy study to include**:
  - intracranial anatomy, face, cardiac activity, 4 chamber, heart, LVOT, RVOT, 3VV, 3VT, cord insert, spine, extremities, amniotic fluid (include comment of WNL/oligohydramnios/polyhydramnios and measurement if after 24 weeks), placenta, umbilical cord, maternal cervical length, maternal adnexa

Fetal third trimester - growth

- Competency
- Position, lat. ventricle, 4-chamber, RVOT, LVOT, stomach, bladder, placenta, fluid, biometry measurements, and any anatomy that was not obtained during the second-trimester scan.

Biophysical

- Competency
- BPP – per department protocol

Aorta/IVC

- Competency

- This could be included with an abdominal complete ultrasound or on its own.

Vascular:

Proficiencies:

- Abdominal duplex (renal art/SMA/celiac): Visceral vascular

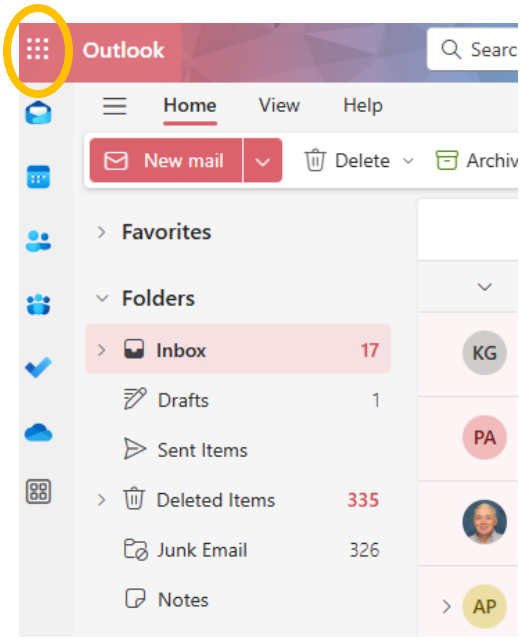
Competencies:

- Carotid
- Aortoiliac duplex
- ABI
- Lower arterial
- Lower venous
- Venous lower insufficiency
- Upper venous

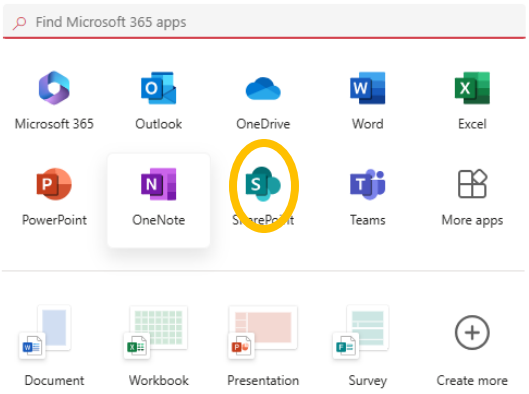
Two Ways to access the protocols for Radiology and Children's Hospital

OPTION 1:

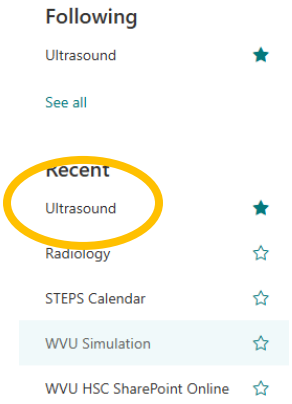
1. If using your WVU Medicine email. Go to the nine dots in the upper left corner.



2. Select Sharepoint



3. Select ultrasound

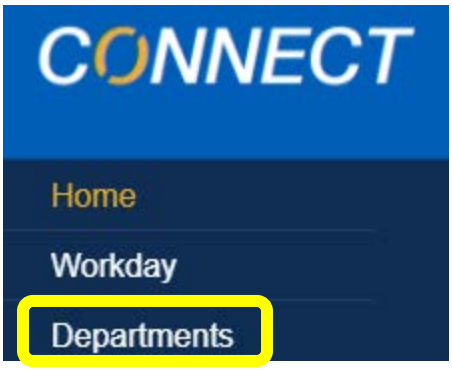


4. Select protocols

OPTION 2:

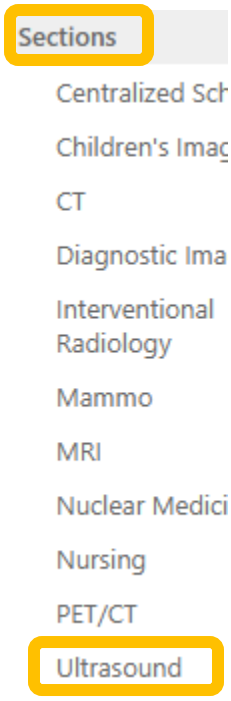
1. Open Connect

2. Open Departments

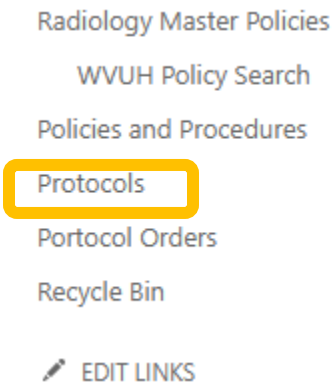


3. Scoll down until you see the Clinical Services heading, and select Radiology.

4. Under sections, select Ultrasound



5. Select protocols



WVUMedicine

West Virginia University Hospitals, Inc.
Diagnostic Medical Sonography Education Program

Clinic Rotations **Semester I** **Fall 2025**

June 30th - December 19th

Class of 2026	June 30-July 4	July 7-11	July 14-18	July 21-25	July 28-Aug 1	August 4-8	August 11-15	August 18-22	August 25-29	Sept 1-5	Sept 8-12	Sept 15-19	Sept 22-26	Sept 29-Oct 3	Oct 6-10	Oct 13-17	Oct 20-24	Oct 27-31	Nov 3-7	Nov 10-14	Nov 17-21	Nov 24-28	Dec 1-5	Dec 8-12	Dec 15-19
Alina Asmar	O	O	O	1	1	8	6	9	9	2	2	1	1	9	9	10	10	2	2	6	OB	2	8	Electives	
Hunter Butcher	O	O	O	2	2	1	1	8	6	9	9	2	2	1	1	9	9	10	10	8	6	OB	2		
Kaitlin Heavener	O	O	O	9	9	2	2	1	1	8	6	10	10	2	2	1	1	9	9	2	8	6	OB		
Kaylin Nixon	O	O	O	8	6	9	9	2	2	1	1	9	9	10	10	2	2	1	1	OB	2	8	6		

Key	Clinical Education Site	Hours
1	Physician's Office Center (Outpatient)	7:30-4:00
2	Ruby Memorial Hospital (Inpatient)	7:00-3:30
3	Vascular Lab	8:00-4:30
4	Betty Puskar Breast Care Center	7:30-4:00
5	High Risk Obstetrics & Gynecology	7:30-4:00
6	Cheat Lake Physicians (OB & General)	7:30-4:00
7	University Town Center (OB)	7:30-4:00
8	University Town Center (Outpatient)	8:00-4:30
9	Children's Hospital	7:30-4:00
10	Fairmont Gateway Clinic	8:00-4:30

Cheat Lake General Ultrasound clinic hours are Mon-Thurs 7:30-4:00 and **Fridays 7:00-3:30**
OB clinic sites will be assigned on Trajecsys.

***Schedule is subject to change at the discretion of the Program Director/Clinical Coordinator.*

Class Vacations:	Fall Break: October 17th
Holidays:	Independence Day: July 4th
	Labor Day: September 1st
	Thanksgiving: Novemeber 27 - 28
	Christmas/New Years: Dec 22 - Jan 2
Graduation:	December 4, 2026 (tenatively)

Elective rotation selections by Monday, Nov 10th

Parking for offsite clinic locations

Fairmont Gateway:

- There are signs that indicate where the employee parking is located. Park in the employee designated spots. These spots are around the edge of the parking lot.

University Town center:

- There are signs that indicate where the employee parking is located. Park in the employee designated spots. These spots are around the edge of the parking lot.

Cheat Lake Physicians:

- Their parking spots are numbered, so you must be careful where you park. At this time (5/28/2025) you can park in the upper lot, within the yellow lines.

Semester 1

West Virginia University Hospitals
Medical Center Drive
Morgantown, WV 26506
304-598-4187

SONT 300: Applied Sonography I

Semester 1

2025-2026

540 Clock hours

Instructor(s): Caitlin Chisler, RBA, RDMS, RT(R)
Various Staff Technologists
Prerequisites: Acceptance into the program, SONT 340 Intro to sonography
Locations: WVU Medicine Physician's Office Center
WVU Medicine Ruby Memorial Hospital, Inpatient Area
WVU Medicine Children's Hospital
WVU Medicine Cheat Lake Physicians, General Radiology Room
WVU Medicine University Town Center, General Radiology Rooms
WVU Medicine Fairmont Gateway Center, General Radiology Room
Time: Monday-Friday, day shift. Hours are determined by clinic rotation. See the clinic schedule.
Textbook: N/A
Supporting Documents: Clinical Handbook and Trajecsys Report System

Course Description:

This is the first of three courses that offer the student clinical education in Sonography. This course takes place in the various Ultrasound Departments listed. This course incorporates a minimum of one (1) week and a maximum of two (2) weeks of rotations through clinical areas. The student will be oriented to the department and patient care. The student will learn to perform Ultrasound exams and procedures under direct supervision. The student also receives instruction and experience in regard to a technologist's responsibilities.

Course Objectives:

1. Abide by the dress code and other policies as stated in the Student Handbook
2. Develop proficiency and confidence in the performance of routine ultrasound examinations by functioning under direct supervision.
3. Identify when to modify a protocol and successfully perform the modification.
4. Maintain a clean, comfortable, and safe environment
7. Employ proper precautions to prevent disease transmission
8. Demonstrate how to properly prepare a patient for the requested exam.
9. Ensure that professional performance and competence are reflected throughout an exam
10. Ensure proper setup and clean-up of the ultrasound exam rooms and work areas.
11. Achieve a minimum of 86% on each Comprehensive examination and overall clinic grade.
12. To complete a minimum number of Semester I Clinical Competencies.

Clinical Grading calculation:

The student's grade consists of several components, each utilizing a different mechanism to ensure a complete and comprehensive evaluation of clinical performance. The following components and weighted averages are utilized:

Component	Weighted Average
Clinical Coordinator Points	5%
Orientation Checklists	5%
Weekly Evaluations	20%
Scan Lab Competencies	20%
Completed Competencies/proficiencies	50%

Clinical Grade Scale:

The following grading scale will be utilized as an objective evaluation mechanism for representing the student's clinical grade and performance.

Percentage Grade	Letter Grade	Quality Points
100%-93%	A	4.0
92%-86%	B	3.0
85%-78%	C	2.0
77%-70%	D	1.0
<70%	F	0.0

Clinical Grade Standard (minimum)

Each student must achieve a minimum overall weighted clinical average of **86% (B grade)** by the end of each semester to complete the clinical education component. There are no options for repeating a clinical level. Students need to finish each clinical education level before moving on to the next semester. Therefore, if a student does not reach an 86% (B grade) weighted clinical average at the end of a semester, they will be dismissed from the program. The Clinical Education Coordinator will provide counseling about clinical progress at mid-term, at the end of the semester, and as needed. However, it is the student's responsibility to stay aware of their clinical progress.

Daily Log Sheets:

Each day, students will report the procedures that were observed or performed on the Daily Log sheet in the Trajecsys Clinical Report System. Not only is this required by the JRC-DMS, but sonographers can receive up to six continuing education credits from the SDMS for working with students.

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The following participation levels are used when filling out the Daily Log sheet:

1. **Observed (Level 1)**: Student assisted with patient care and setting up and clean-up of the exam room, but only watches and learns while the sonographer performs the entire exam.
2**. Observed and Assisted (Level 2):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student provided minimal assistance with patient care.
3. **Scanned < 10 minutes (Level 3):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for 10 minutes or less.
4. **Scanned > 10 minutes (Level 4):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for more than 10 minutes, but not the entire exam.
5. **Scanned entire exam (Level 5):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the supervised student was responsible for the entire sonographic examination.

Required competencies:

A copy of the form used to record competency grades can be found at the end of this document.

Abdomen (13)	OB/GYN (7)	Vascular (7)
Adult kidneys	Transabdominal Pelvis	Aorta/IVC
Thyroid	Transvaginal Pelvis	Carotid
Right Upper Quadrant	1st Trimester	ABI
Spleen	2nd Trimester - Anatomy	Venous lower
Chest	3rd Trimester - Growth	Venous upper
Complete Abdomen	Biophysical profile	Arterial lower
Biopsy		Abdominal Duplex*
Scrotum		
Pediatric Renal		
Neonatal Head		
Breast		
Abdominal Doppler*		
GI tract*		

*Can be done as a proficiency or competency

Timing of Competencies:

1st Semester: Students are required to complete a total of four competencies by the end of the 1st semester and a minimum of two by midterm. //**4 Competencies**

Recommendations for exam types to be completed include, but are not limited to:

- Adult Kidneys, Thyroid, RUQ, Pediatric Renal, Thyroid, Aorta, transabdominal female pelvis

Proficiency – as defined on page 18 of the JRC-DMS standards and guidelines- proficiencies may be demonstrated in a clinical setting or a simulated environment.

> The only proficiencies allowed by the JRC-DMS include Abdominal vascular Doppler assessment, which includes hepatic, mesenteric, and renal vasculature, and a GI tract assessment.

Competency – must be done in a clinical setting.

Scan lab competencies:

Most of the required skills are practiced in the scan lab. Once a student feels comfortable with the scanning protocol and the exam process, they should inform the instructor that they are ready to complete a scan lab competency. If the student scores above 92% on this competency, they will be eligible to complete their practice exams and ultimately the competency for the actual exam. Scan lab competencies account for 20% of the final clinic grade.

Orientation Checklist:

At the beginning of each new rotation, the student will be given an Orientation Checklist for his/her assigned rotation. These checklists are to familiarize the student with their new area with various objectives and tasks. Completing each item on the checklist and turning it in earns the student one (1) point. Orientation Checklists carry a weighted average of 5% towards the overall clinic grade.

Weekly student performance evaluations:

After each week in the assigned clinical area, an "Entry-Level Student Evaluation Form" or the regular "Student Evaluation Form" needs to be completed by your Staff Technologist on Trajecsys. This evaluation represents his/her estimation of your overall performance. **The "Entry-Level" form will only need to be used from July to September.**

After your Mid-Term Evaluation, the regular "Student Evaluation" form will be used. Each evaluation is scored from 1 to 5 points (1 = Unsatisfactory; 2 = Needs Improvement; 3 = Average; 4 = Above Average; 5 = Excellent), and the combined average of each section will determine your weekly evaluation points. These points will be included in the student's overall Clinical Performance Evaluation category, which carries a weighted average of 20% towards the overall clinic grade. If more than one evaluation is submitted per rotation, the average of the points will be counted. Failure to complete one of these evaluations after each clinical rotation will result in the student receiving no points for that rotation

Staff Clinical Instructor Evaluations:

At the end of each quarter, the student is required to complete a "Staff Clinical Instructor Evaluation" on Trajecsys. These will be used to evaluate the quality of the technologist's clinical instruction. Comments and grades from the evaluations are shared with the sonographer's supervisor. Student names are not included.

Clinical grade calculation:

Below is the form used to calculate the student's clinical grade. This is calculated at each mid-term and the end of each term.

Orientation Checklists		out of	6	0	x 5%	0.00
Clinical Coordinator Evaluat		out of	5	0	x 5%	0.00
Weekly Clinic Evaluations	#VALUE!	out of	5	#VALUE!	x 20%	#VALUE!
Scan Lab Assessments	#VALUE!	out of	100	#VALUE!	x 20%	#VALUE!
Competencies/Proficiencies	#VALUE!	out of	100	#VALUE!	x 50%	#VALUE!

Clinical Coordinator Points:

Prior to mid-term and at the end of each semester, the Clinical Coordinator will evaluate each student using the "Clinical Coordinator Points Evaluation Form". Each category in the form is worth 1 to 5 points, and the total points are divided by the total number of categories (15) to get a value between 1 and 5. Clinical Coordinator Points carry a weighted average of 5% towards the overall clinic grade.

Clinic orientation check list

Student Name: Rotation: **Children's** Semester: **1**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area**.

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **POC** Semester: **1**

Date: _____

The purpose of this list is to familiarize yourself with each new area in which you will be working. This should be completed at the beginning of each new rotation.

** These check off lists will be counted as a grade under your weekly evaluations for each new rotation.

- □ Most importantly introduce yourself to all sonographers in your rotation area.

Locations for the following:

- □ Printer the intake forms print off.
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms.
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient.

Clinic orientation check list

Student Name: Rotation: **Inpatient** Semester: **1**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area.**

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **Cheat Lake General** Semester: **1**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ Most importantly, introduce yourself to all sonographers in your rotation area.

Locations for the following:

- □ How do you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **Fairmont Gateway** Semester: **1**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ Most importantly, introduce yourself to all sonographers in your rotation area.

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **UTC General** Semester: **1**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area.**

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Semester 2

West Virginia University Hospitals
Medical Center Drive
Morgantown, WV 26506
304-598-4187

IMAGING SCIENCE EDUCATION PROGRAMS
Diagnostic Medical Sonography Program

SONT 301: Applied Sonography II

Semester 2
2025-2026
610 Clock hours

Instructor(s): Caitlin Chisler, RBA, RDMS, RT(R)
Various Staff Technologists
Prerequisites: Acceptance into the program, SONT 340 Intro to sonography
Locations: WVU Medicine Physician's Office Center
WVU Medicine Ruby Memorial Hospital, Inpatient Area
WVU Medicine Children's Hospital
WVU Medicine Cheat Lake Physicians, OBGYN department
WVU Medicine University Town Center, OBGYN department
WVU Medicine Children's Hospital, Maternal Fetal Medicine
WVU Medicine Fairmont Gateway Center, General Radiology Room

Time: Monday-Friday, day shift. Hours are determined by clinic rotation. See the clinic schedule.
Textbook: N/A
Supporting Documents: Clinical Handbook and Trajecsys Report System

Course Description:
This is the first of three courses that offer the student clinical education in Sonography. This course takes place in the various Ultrasound Departments listed. This course incorporates a minimum of one (1) week and a maximum of two (2) weeks of rotations through clinical areas. The student will be oriented to the department and patient care. The student will learn to perform Ultrasound exams and procedures under direct supervision. The student also receives instruction and experience in regard to a technologist's responsibilities.

Course Objectives:
1. Abide by the dress code and other policies as stated in the Student Handbook
2. Develop proficiency and confidence in the performance of routine ultrasound examinations by functioning under direct supervision.
3. Identify when to modify a protocol and successfully perform the modification.
4. Maintain a clean, comfortable, and safe environment
7. Employ proper precautions to prevent disease transmission
8. Demonstrate how to properly prepare a patient for the requested exam.
9. Ensure that professional performance and competence are reflected throughout an exam
10. Ensure proper setup and clean-up of the ultrasound exam rooms and work areas.
11. Achieve a minimum of 86% on each Comprehensive examination and overall clinic grade.
12. To complete a minimum number of Semester I Clinical Competencies.

Clinical Grading calculation:

The student's grade consists of several components, each utilizing a different mechanism to ensure a complete and comprehensive evaluation of clinical performance. The following components and weighted averages are utilized:

Component	Weighted Average
Clinical Coordinator Points	5%
Orientation Checklists	5%
Weekly Evaluations	20%
Scan Lab Competencies	20%
Completed Competencies/proficiencies	50%

Clinical Grade Scale:

The following grading scale will be utilized as an objective evaluation mechanism for representing the student's clinical grade and performance.

Percentage Grade	Letter Grade	Quality Points
100%-93%	A	4.0
92%-86%	B	3.0
85%-78%	C	2.0
77%-70%	D	1.0
<70%	F	0.0

Clinical Grade Standard (minimum)

Each student must achieve a minimum overall weighted clinical average of **86% (B grade)** by the end of each semester to complete the clinical education component. There are no options for repeating a clinical level. Students need to finish each clinical education level before moving on to the next semester. Therefore, if a student does not reach an 86% (B grade) weighted clinical average at the end of a semester, they will be dismissed from the program. The Clinical Education Coordinator will provide counseling about clinical progress at mid-term, at the end of the semester, and as needed. However, it is the student's responsibility to stay aware of their clinical progress.

Daily Log Sheets:

Each day, students will report the procedures that were observed or performed on the Daily Log sheet in the Trajecsys Clinical Report System. Not only is this required by the JRC-DMS, but sonographers can receive up to six continuing education credits from the SDMS for working with students.

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The following participation levels are used when filling out the Daily Log sheet:

1. **Observed (Level 1)**: Student assisted with patient care and setting up and clean-up of the exam room, but only watches and learns while the sonographer performs the entire exam.
2**. Observed and Assisted (Level 2):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student provided minimal assistance with patient care.
3. **Scanned < 10 minutes (Level 3):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for 10 minutes or less.
4. **Scanned > 10 minutes (Level 4):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for more than 10 minutes, but not the entire exam.
5. **Scanned entire exam (Level 5):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the supervised student was responsible for the entire sonographic examination.

Required competencies:

A copy of the form used to record competency grades can be found at the end of this document.

Abdomen (13)	OB/GYN (7)	Vascular (7)
Adult kidneys	Transabdominal Pelvis	Aorta/IVC
Thyroid	Transvaginal Pelvis	Carotid
Right Upper Quadrant	1st Trimester	ABI
Spleen	2nd Trimester - Anatomy	Venous lower
Chest	3rd Trimester - Growth	Venous upper
Complete Abdomen	Biophysical profile	Arterial lower
Biopsy		Abdominal Duplex*
Scrotum		
Pediatric Renal		
Neonatal Head		
Breast		
Abdominal Doppler*		
GI tract*		

*can be done as a proficiency or competency

Timing of Competencies:

2nd Semester: Students are required to complete a total of eight competencies by the end of the 2nd semester and a minimum of two by midterm. //**8 Competencies or Proficiencies**

Recommendations for exam types to be completed include, but are not limited to:

- GI Tract, TV Pelvis, Abdominal Doppler, ABI or PVR with exercise, Lower PVR, RUQ, Spleen, Chest, Neonatal Head, Carotid, Venous Upper, Venous Lower, 1st trimester OB, 3rd Trimester growth, and/or BPP.

Proficiency – as defined on page 18 of the JRC-DMS standards and guidelines- proficiencies may be demonstrated in a clinical setting or a simulated environment.

> The only proficiencies allowed by the JRC-DMS include Abdominal vascular Doppler assessment, which includes hepatic, mesenteric, and renal vasculature, and a GI tract assessment.

Competency – must be done in a clinical setting.

Scan lab competencies:

Most of the required skills are practiced in the scan lab. Once a student feels comfortable with the scanning protocol and the exam process, they should inform the instructor that they are ready to complete a scan lab competency. If the student scores above 92% on this competency, they will be eligible to complete their practice exams and ultimately the competency for the actual exam. Scan lab competencies account for 20% of the final clinic grade.

Orientation Checklist:

At the beginning of each new rotation, the student will be given an Orientation Checklist for his/her assigned rotation. These checklists are to familiarize the student with their new area with various objectives and tasks. Completing each item on the checklist and turning it in earns the student one (1) point. Orientation Checklists carry a weighted average of 5% towards the overall clinic grade.

Weekly student performance evaluations:

After each week in the assigned clinical area, an "Entry-Level Student Evaluation Form" or the regular "Student Evaluation Form" needs to be completed by your Staff Technologist on Trajecsys. This evaluation represents his/her estimation of your overall performance. **The "Entry-Level" form will only need to be used from July to September.**

After your Mid-Term Evaluation, the regular "Student Evaluation" form will be used. Each evaluation is scored from 1 to 5 points (1 = Unsatisfactory; 2 = Needs Improvement; 3 = Average; 4 = Above Average; 5 = Excellent), and the combined average of each section will determine your weekly evaluation points. These points will be included in the student's overall Clinical Performance Evaluation category, which carries a weighted average of 20% towards the overall clinic grade. If more than one evaluation is

submitted per rotation, the average of the points will be counted. Failure to complete one of these evaluations after each clinical rotation will result in the student receiving no points for that rotation

Staff Clinical Instructor Evaluations:

At the end of each quarter, the student is required to complete a "Staff Clinical Instructor Evaluation" on Trajecsys. These will be used to evaluate the quality of the technologist's clinical instruction. Comments and grades from the evaluations are shared with the sonographer's supervisor. Student names are not included.

Clinical grade calculation:

Below is the form used to calculate the student's clinical grade. This is calculated at each mid-term and the end of each term.

Orientation Checklists		out of	100	0	x 5%	0.00
Daily Log Sheets		out of	100	0	x 5%	0.00
Clinical Coordinator Evalua		out of	5	0	x 5%	0.00
Weekly Clinic Evaluations	#VALUE!	out of	5	#VALUE!	x 20%	#VALUE!
Scan Lab Assessments	#VALUE!	out of	100	#VALUE!	x 20%	#VALUE!
Competencies/Proficiencies	#VALUE!	out of	100	#VALUE!	x 45%	#VALUE!

Clinical Coordinator Points:

Prior to mid-term and at the end of each semester, the Clinical Coordinator will evaluate each student using the "Clinical Coordinator Points Evaluation Form". Each category in the form is worth 1 to 5 points, and the total points are divided by the total number of categories (15) to get a value between 1 and 5. Clinical Coordinator Points carry a weighted average of 5% towards the overall clinic grade.

Clinic orientation check list

Student Name: Rotation: **Cheat Lake OB** Circle One Semester: **1 or 2**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

□ Most importantly, introduce yourself to all sonographers in your rotation area.

Locations for the following:

□ How do you know when patients arrive?

- What do you do with the patient when the exam is finished?

□ Patient waiting room.

□ Supply closet – for gel, gloves, probe covers, and masks.

□ Linen closet and the number to call for linens.

- How and where do the sonographers store the linen in the exam rooms?

□ Staff and/or patient bathrooms

□ Fire alarm(s) for the area

□ Fire extinguisher for the area

□ Closest emergency exit

□ Crash cart

□ What is the number for urgent response/code?

□ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **MFM OB** Circle One Semester: **1 or 2**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area.**

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Circle One

Student Name: Rotation: **UTC OB** Semester: **1 or 2**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area.**

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

Clinic orientation check list

Student Name: Rotation: **Vascular** Circle One Semester: **1 or 2**

Date: _____

The purpose of this list is to familiarize you with each new area in which you will be working. This must be completed at the beginning of each new rotation.

****Each checklist will be worth 1 point, representing 5% of the clinical grade. ****

- □ **Most importantly, introduce yourself to all sonographers in your rotation area.**

Locations for the following:

- □ How will you know when patients arrive?
    - o What do you do with the patient when the exam is finished?
- □ Patient waiting room.
- □ Supply closet – for gel, gloves, probe covers, and masks.
- □ Linen closet and the number to call for linens.
    - o How and where do the sonographers store the linen in the exam rooms?
- □ Staff and/or patient bathrooms
- □ Fire alarm(s) for the area
- □ Fire extinguisher for the area
- □ Closest emergency exit
- □ Crash cart
- □ What is the number for urgent response/code?
- □ If in an outpatient setting, where would you find oxygen and tubing for a patient?

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304-598-4187

IMAGING SCIENCE EDUCATION PROGRAMS
Diagnostic Medical Sonography Program

SONT 302: Applied Sonography III

Semester 3
2025-2026
610 Clock hours

Instructor(s): Caitlin Chisler, RBA, RDMS, RT(R)
Various Staff Technologists
Prerequisites: Acceptance into the program, SONT 301 Applied Sonography III
Locations: WVU Medicine Physician's Office Center
WVU Medicine Ruby Memorial Hospital, Inpatient Area
WVU Medicine Children's Hospital
WVU Medicine Cheat Lake Physicians, OBGYN department
WVU Medicine University Town Center, OBGYN department
WVU Medicine Children's Hospital, Maternal Fetal Medicine
WVU Medicine Fairmont Gateway Center, General Radiology Room
WVU Medicine Ruby Memorial Hospital, Vascular Lab

Time: Monday-Friday, day shift. Hours are determined by clinic rotation. See the clinic schedule.
Textbook: N/A
Supporting Documents: Clinical Handbook and Trajecsys Report System

Course Description:
This is the first of three courses that offer the student clinical education in Sonography. This course takes place in the various Ultrasound Departments listed. This course incorporates a minimum of one (1) week and a maximum of two (2) weeks of rotations through clinical areas. The student will be oriented to the department and patient care. The student will learn to perform Ultrasound exams and procedures under direct supervision. The student also receives instruction and experience in regard to a technologist's responsibilities.

Course Objectives:
1. Abide by the dress code and other policies as stated in the Student Handbook
2. Develop proficiency and confidence in the performance of routine ultrasound examinations by functioning under direct supervision.
3. Identify when to modify a protocol and successfully perform the modification.
4. Maintain a clean, comfortable, and safe environment
7. Employ proper precautions to prevent disease transmission
8. Demonstrate how to properly prepare a patient for the requested exam.
9. Ensure that professional performance and competence are reflected throughout an exam
10. Ensure proper setup and clean-up of the ultrasound exam rooms and work areas.
11. Achieve a minimum of 86% on each Comprehensive examination and overall clinic grade.
12. To complete a minimum number of Semester I Clinical Competencies.

Clinical Grading calculation:

The student's grade consists of several components, each utilizing a different mechanism to ensure a complete and comprehensive evaluation of clinical performance. The following components and weighted averages are utilized:

Component	Weighted Average
Clinical Coordinator Points	10%
Weekly Evaluations	20%
Scan Lab Competencies (Vascular)	20%
Completed Competencies/proficiencies	50%

Clinical Grade Scale:

The following grading scale will be utilized as an objective evaluation mechanism for representing the student's clinical grade and performance.

Percentage Grade	Letter Grade	Quality Points
100%-93%	A	4.0
92%-86%	B	3.0
85%-78%	C	2.0
77%-70%	D	1.0
<70%	F	0.0

Clinical Grade Standard (minimum)

Each student must achieve a minimum overall weighted clinical average of **86% (B grade)** by the end of each semester to complete the clinical education component. There are no options for repeating a clinical level. Students need to finish each clinical education level before moving on to the next semester. Therefore, if a student does not reach an 86% (B grade) weighted clinical average at the end of a semester, they will be dismissed from the program. The Clinical Education Coordinator will provide counseling about clinical progress at mid-term, at the end of the semester, and as needed. However, it is the student's responsibility to stay aware of their clinical progress.

Daily Log Sheets:

Each day, students will report the procedures that were observed or performed on the Daily Log sheet in the Trajecsys Clinical Report System. Not only is this required by the JRC-DMS, but sonographers can receive up to six continuing education credits from the SDMS for working with students.

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Medical Center Drive
Morgantown, WV 26506
304-598-4187

The following participation levels are used when filling out the Daily Log sheet:

1. **Observed (Level 1)**: Student assisted with patient care and setting up and clean-up of the exam room, but only watches and learns while the sonographer performs the entire exam.
2**. Observed and Assisted (Level 2):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student provided minimal assistance with patient care.
3. **Scanned < 10 minutes (Level 3):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for 10 minutes or less.
4. **Scanned > 10 minutes (Level 4):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the student scanned the patient under direct supervision for more than 10 minutes, but not the entire exam.
5. **Scanned entire exam (Level 5):** Student assisted with patient care and setting up and clean-up of the exam room. Also, the supervised student was responsible for the entire sonographic examination.

Required competencies:

A copy of the form used to record competency grades can be found at the end of this document.

Abdomen (13)	OB/GYN (7)	Vascular (7)
Adult kidneys	Transabdominal Pelvis	Aorta/IVC
Thyroid	Transvaginal Pelvis	Carotid
Right Upper Quadrant	1st Trimester	ABI
Spleen	2nd Trimester - Anatomy	Venous lower
Chest	3rd Trimester - Growth	Venous upper
Complete Abdomen	Biophysical profile	Arterial lower
Biopsy		Abdominal Duplex*
Scrotum		
Pediatric Renal		
Neonatal Head		
Breast		
Abdominal Doppler*		
GI tract*		

*Can be done as a proficiency or competency

Timing of Competencies:

3rd Semester: Students are required to complete all competencies by the end of the 3rd semester to graduate. //**14 Competencies or Proficiencies**

Recommendations for exam types to be completed include, but are not limited to:

- Breast, Abdominal Duplex, 1st Trimester, 2nd Trimester, 3rd Trimester, Scrotum, Biophysical Profile, TV Pelvis, Biopsy, Complete Abdomen, Lower Art

Proficiency – as defined on page 18 of the JRC-DMS standards and guidelines- proficiencies may be demonstrated in a clinical setting or a simulated environment.

> The only proficiencies allowed by the JRC-DMS include Abdominal vascular Doppler assessment, which includes hepatic, mesenteric, and renal vasculature, and a GI tract assessment.

Competency – must be done in a clinical setting.

Scan lab competencies:

Most of the required skills are practiced in the scan lab. Once a student feels comfortable with the scanning protocol and the exam process, they should inform the instructor that they are ready to complete a scan lab competency. If the student scores above 92% on this competency, they will be eligible to complete their practice exams and ultimately the competency for the actual exam. Scan lab competencies account for 20% of the final clinic grade.

Weekly student performance evaluations:

After each week in the assigned clinical area, an "Entry-Level Student Evaluation Form" or the regular "Student Evaluation Form" needs to be completed by your Staff Technologist on Trajecsys. This evaluation represents his/her estimation of your overall performance. **The "Entry-Level" form will only need to be used from July to September.**

After your Mid-Term Evaluation, the regular "Student Evaluation" form will be used. Each evaluation is scored from 1 to 5 points (1 = Unsatisfactory; 2 = Needs Improvement; 3 = Average; 4 = Above Average; 5 = Excellent), and the combined average of each section will determine your weekly evaluation points. These points will be included in the student's overall Clinical Performance Evaluation category, which carries a weighted average of 20% towards the overall clinic grade. If more than one evaluation is submitted per rotation, the average of the points will be counted. Failure to complete one of these evaluations after each clinical rotation will result in the student receiving no points for that rotation

Staff Clinical Instructor Evaluations:

At the end of each quarter, the student is required to complete a "Staff Clinical Instructor Evaluation" on Trajecsys. These will be used to evaluate the quality of the technologist's clinical instruction. Comments and grades from the evaluations are shared with the sonographer's supervisor. Student names are not included.

Clinical Coordinator Points:

Prior to mid-term and at the end of each semester, the Clinical Coordinator will evaluate each student using the "Clinical Coordinator Points Evaluation Form". Each category in the form is worth 1 to 5 points, and the total points are divided by the total number of categories (15) to get a value between 1 and 5. Clinical Coordinator Points carry a weighted average of 5% towards the overall clinic grade.

Clinical grade calculation:

Below is the form used to calculate the student's clinical grade. This is calculated at each mid-term and the end of each term.

Clinical Coordinator Evaluat		out of	5	0	x 10%	0.00
Weekly Clinic Evaluations	#VALUE!	out of	5	#VALUE!	x 20%	#VALUE!
Scan Lab Assessments	#VALUE!	out of	100	#VALUE!	x 20%	#VALUE!
Competencies/Proficiencies	#VALUE!	out of	100	#VALUE!	x 50%	#VALUE!

Examples of Evaluations

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IMAGING SCIENCE EDUCATION PROGRAMS

Diagnostic Medical Sonography Program

	Assessment Lab		Practice exams	Clinical Competency/Proficiency			
General Patient Care Procedures	**Date**	**Grade**		**Date**	**Tech**	**PT/SIM**	**Grade**
CPR Certification		*Pass*					
Vitals (BP, Pulse, Temp, O2)		*Pass*					
Venipuncture		*Pass*					
Scanning Procedures	**Date**	**Grade**		**Date**	**Tech**	**PT/SIM**	**Grade**
Adult Kidneys						PT	
Thyroid						PT	
Right Upper Quadrant						PT	
Spleen						PT	
Chest						PT	
Complete Abdomen						PT	
Biopsy						PT	
Scrotum						PT	
Pediatric Renal						PT	
Neonatal Head						PT	
Breast						PT	
Abdominal Doppler						PT	
GI Tract						PT	
TA Pelvis						PT	
TV Pelvis						PT	
Fetal 1st Trimester						PT	
Fetal 2nd Trimester - anatomy						PT	
Fetal 3rd Trimester - growth						PT	
Biophysical Profile						PT	
Aorta/IVC						PT	
Carotid						PT	
ABI						PT	
Venous Lower						PT	
Venous Upper						PT	
Arterial Lower						PT	
Abdominal Duplex						PT	
Overall Assessment Lab Points		**0.00**		**Overal Clinical Competency Points**			**0.00**

Example of the entry-level weekly evaluation used July-September

Section I: **A. Use of Ultrasound Equipment:**					
Uses & attempts to gain knowledge of various functions of the ultrasound machine	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Uses and attempts to gain knowledge of Merlin and Centricity	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
B. Technical Performance:					
Attempts to observe all exams and scan when appropriate	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Able to enter vital information on the Patient data sheet	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Correlates the patient history, lab values, & previous findings before the exam	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Follows department procedures and carries them out efficiently. (Ex. paperwork, schedules, protocol, Merlin, etc.)	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Assures rooms are adequately stocked (Ex. sheets, towels, scanning gel)	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Utilization of gloves and mask (when necessary)for infection control.	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Section II: **A. Demeanor regarding...**					
Patient	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Staff	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Profession	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
B. Attendance					
Participated with all exams during clinic, with the exception of didactic hours.	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Satisfactory Attendance throughout rotation without tardiness	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
C. Appearance					
Follows the Clinical Policies regarding uniform guidelines and Personal Hygiene	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior
Section III: Patient/Customer Communication					
Student effectively utilizes the AIDET Communication	○ Unsatisfactory	○ Needs Improvement	○ Average	◉ Above Average	○ Superior

EXAMPLE of a WEEKLY EVALUATION

1 = Poor
2 = Needs Improvement
3 = Average
4 = Above Average
5 = Excellent

This will be filled out for each rotation, by the sonographer that you worked with the most. This is the form that will be used after the Semester 1 midterm until graduation.

Clinical Weekly Evaluation					
Communication Skills: Ability to communicate, interact and deal effectively with staff and patients.	○1	○2	○3	◉4	○5
Patient Perception: Demonstrates respect for patient; preserves patient modesty. Ability to perceive patient needs creating a warm, friendly and comfortable experience.	○1	○2	○3	◉4	○5
Dependability: Demonstrates reliability and follow-through regarding clinical responsibilities.	○1	○2	○3	◉4	○5
Initiative: Energy and motivation in starting and completing task.	○1	○2	○3	◉4	○5
Attitude: Willingness to be guided, directed and instructed while displaying positive response.	○1	○2	○3	◉4	○5
Organization: Ability to effectively plan, prepare for, and carry out procedural requirements.	○1	○2	○3	◉4	○5
Ability to Follow Directions: Degree to which student can listen, reason and interpret tasks.	○1	○2	○3	◉4	○5
Self-Confidence: Presents with maturity and competence; lacks timidity in dealing with patients or other associates and students. Not overly-confident or aloof.	○1	○2	○3	◉4	○5
Accountability: Present in assigned clinical areas; available to supervising sonographer; respectful of lunch and break times.	○1	○2	○3	◉4	○5
Quality of Clinical Procedures: Thoroughness in procedural performance; accuracy in completing procedures according to documented performance standards.	○1	○2	○3	◉4	○5
Did the student use their cellphone or smartwatch while in the clinic?	○Yes	○No			
Did the student keep the exam room stocked with linen, gel, gloves, etc.?	○Yes	○No			
The greatest strength(s) demonstrated by this student during this assignment has been:					
The area(s) most requiring development based upon the student's performance during this assignment would be:					

Competency example

SECTION 1: INTERPRETATION OF REQUEST/DATA ENTRY/PATIENT CARE SKILLS Completed necessary paperwork (EPIC documentation of exam times, additional charges if applicable, & patient education)	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Obtain pertinent information that will assist in the evaluation of the patient. The student must gather and document the important patient history, which includes past exams, lab results, the reason for the current exam, and any surgical history.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Communicated with the patient professionally Informed the patient of their role as a student, obtained permission from the patient to begin the exam, and anticipated the patient's physical and emotional needs throughout the procedure.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Patient rapport Explained the roles of all personnel in the exam room, explained the examination process, and answered the patients' questions.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Interacted professionally with members of the healthcare team Able to plan and discuss the scan, and can suggest differential diagnoses.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
SECTION 2: TECHNICAL PROFICIENCY **Obtain necessary images of anatomy. (Refer to exam protocol)** Students are expected to understand and adhere to the protocol, including correctly labeling images, ensuring that all images have been saved, and that all images are in the correct order.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Obtain accurate measurements of the necessary anatomy. Student accurately measured the anatomy and/or pathology per protocol.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Utilization of equipment and image settings (gain, preset, depth, resolution, contrast, artifact suppression, and/or zoom) Has the ability to adjust the various settings beyond selecting the exam preset.	○ Unsatisfactory ◉ Satisfactory ○ N/A
Correctly labeled the images Uses correct terminology and correct format to label the images.	○ Unsatisfactory ◉ Satisfactory ○ N/A
Transducer selection and patient positioning. Understands which transducer will provide the most accurate images of the region of interest. Understands when and if changing patient position is necessary to obtain better visualization of the anatomy and pathology.	○ Unsatisfactory ◉ Satisfactory ○ N/A

Performs the exam and obtains images in a timely and efficient manner. Works within the scheduled time allotted for the patient. This includes all the steps from obtaining the patient history to ending the exam and completing the study notes.	○ Unsatisfactory ◉ Satisfactory ○ N/A
Proper ergonomics, including sitting/standing, equipment (machine/bed/chair) adjustments, and transducer handling (grip/pressure/orientation).	○ Unsatisfactory ◉ Satisfactory ○ N/A
SECTION 3: KNOWLEDGE OF ANATOMY AND PATHOPHYSIOLOGY **Identify and image abnormalities and/or answer questions about related diseases and disease processes.** Includes optimal images of pathology, including the measurements, color, and/or pulsed Doppler, and relational anatomy. Able to describe the pathology to the sonographer and/or radiologist.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Evaluate and identify subject anatomy and adjacent anatomy Understands the sonographic appearance of the anatomical structures in the region of interest.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Evaluate echogenicity of anatomical structures and relevance. Understands the proper echogenicity of the anatomical structures and can adjust the technical factors to optimize the image.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Adequately convey findings and patient history to the supervising sonographer and, IF available, the interpreting physician. Can describe the normal and abnormal exam findings to the sonographer and can type the findings into the study notes.	○ Poor performance ○ Needs Improvement ○ Performance meets expectations ◉ Above average performance ○ Exceptional performance ○ N/A
Anatomy	○ Unsatisfactory ◉ Satisfactory ○ N/A

A list of anatomy and views specific to the examination

SECTION 4: ANALYTICAL PROBLEM-SOLVING Able to modify the procedure and/or technique to meet any unusual diagnostic or behavioral concerns.	○ Unsatisfactory ◉ Satisfactory ○ N/A
Able to independently undertake any additional steps recommended by the physician or the examiner to complete the exam	○ Unsatisfactory ◉ Satisfactory ○ N/A
SECTION 5: RETEST RECOMMENDATIONS Does the student need to acquire additional experience before reattempting this competency? Please leave constructive feedback in the comment box.	○ Yes ○ No ◉ N/A
Instructor comments:	◉ Enter
Patient ID # (enter 1st 5 digits in text field at right)	◉ Enter

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Clinical Coordinator Points Evaluation

	Sem I Mid-Term	Sem I End	Sem II Mid-Term	Sem II End	Sem III Mid-Term	Sem III End
Quality of Work						
Knowledge and Care of Equipment						
Ability to Follow Directions						
Contribution to Department Workload						
Initiative						
Punctuality & Attendance (Documentation)						
Appearance						
Professional Demeanor						
Cooperation and Teamwork						
Attitude Toward Criticism						
Ethical Reasoning						
Relationship with Instructors and Staff						
Attitude Toward Profession						
Handles Stressful Situations						
Completed all Clinical Instructor Evaluations						
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00

	(1-5 points)
Scale:	**1** = Unsatisfactory
	2 = Needs Improvement
	3 = Average
	4 = Above Average
	5 = Excellent