



Diagnostic Medical  
Abdominal Sonography  
OB/GYN Sonography  
Adult Echocardiography  
Vascular Sonography  
Clinical Syllabus  
2023

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## Contents

CLINICAL EDUCATION RATIONALE .....	4
CLINICAL COURSE GOALS .....	4
CLINICAL OBJECTIVES.....	5
ABDOMINAL CONCENTRATION .....	5
OBSTETRICS AND GYNECOLOGIC CONCENTRATION .....	6
ADULT CARDIAC CONCENTRATION.....	6
VASCULAR CONCENTRATION .....	7
HOW TO SUCCEED IN YOUR DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM .....	9
CLINICAL CURRICULUM: Abdomen Extended Diagnostic Medical Sonography .....	10
CLINICAL CURRICULUM: Adult Echocardiography .....	10
Lab Proficiencies for all programs.....	11
Lab Tracking Sheets .....	12
DMS 131 Clinical Education I.....	19
DMS 232 Clinical Education II.....	19
DMS 233 Clinical Education III.....	20
DMS 234 Clinical Education IV.....	21
CLINICAL RULES and RESPONSIBILITIES FOR STUDENTS .....	21
CLINICAL Participation .....	21
DMS PROGRAM AFFECTIVE DOMAIN PERFORMANCE NOTIFICATION FORM .....	24
COURSE OUTLINE .....	25
Abdomen Extended Clinical Competency List .....	28
Adult Cardiovascular Clinical Competency List.....	29
CLINICAL GRADING SYSTEM .....	30
Clinical Grading.....	31
CLINICAL DRESS CODE.....	33
CLINICAL SITE PARKING .....	34
CLINICAL ABSENCE POLICY .....	34
CLINICAL RECORD KEEPING.....	35
EVALUATION OF STUDENT PERFORMANCE & ETHICS .....	35
WRITTEN ASSIGNMENTS.....	35
CLINICAL FORMS.....	36
CRITERIA FOR Competencies/Proficiencies.....	36
TRAJCSYS .....	37
MAKE-UP TIME FORM.....	44

CLINICAL ABSENCE FORM .....	45
Evaluation of Professional Ethics and Attitudes .....	45
STUDENT EVALUATION OF CLINICAL EXPERIENCE.....	48
STUDENT EVALUATION OF CLINICAL INSTRUCTOR.....	51
RECORD OF ACCUMULATED CLINICAL TIME .....	55
ACKNOWLEDGMENT OF CLINICAL SYLLABUS.....	56
RELEASE AND PROMISE NOT TO SUE.....	57
PERMISSION TO RELEASE INFORMATION .....	58
RECEIPT OF GRADING POLICY.....	59
DMS Clinical Competency Form .....	60
Expectations and JRC DMS Requirements:.....	62
Lab Rules for both Abdomen Extended and Echocardiography Courses .....	63
Expectations of students per clinical semester .....	64
2 Week Evaluation from Clinical Instructors .....	65
2-week Student Self Evaluation:.....	67
Underperforming Student Form.....	69
DMS STUDENT EVALUATION FORM.....	70
<i>OB Tracking 2<sup>nd</sup>/3<sup>rd</sup> Trimester</i> .....	72
2 <sup>nd</sup> /3 <sup>rd</sup> Trimester Fetal Part Attestation Sheet.....	74
SOVAH School of Health Professions Sonography Competency Log.....	75

## **CLINICAL EDUCATION RATIONALE**

The main purpose of clinical education courses in any Diagnostic Medical Sonography program is to transfer of knowledge from theory to the actual acquisition of skills in clinical diagnostic sonography up to a level of job entry competency at the time of graduation.

This transfer is accomplished by a continuum of clinical assignments in all aspects of diagnostic medical sonographic procedures, correlating them as closely as possible to classroom and laboratory experiences.

The student will begin his/her clinical participation by first assisting a practicing sonographer in the execution of his/her duties. This participation moves gradually from a passive mode of observation to a more active mode which involves assisting the sonographer. The rate of student progress is dependent upon the student's ability to comprehend and perform the various objectives assigned to him/her. As the student becomes experienced in each procedure, he/she gradually moves into an independent clinical performance state. At this point the student is performing the procedure under the direct supervision of a sonographer. After documented demonstration of competency and skill in the performance of sonographer procedures, students will be allowed to perform examinations without direct supervision.

## **CLINICAL COURSE GOALS**

Sovah School of Health Professions offers Abdominal Extended, Obstetrics and Gynecology, Vascular and Adult Cardiovascular programs. The Abdominal Extended program includes clinical and didactic experience in abdominal, obstetrics, gynecology, and vascular sonography. The Adult Cardiovascular program includes clinical and didactic experience in adult echocardiography and vascular sonography.

For four semesters in the Diagnostic Medical Sonography Programs, the student will attend the clinical educational sites to:

1. Acquire expertise and proficiency in a wide variety of sonographic procedures by applying classroom theory to actual practice of technical skills on specified levels of competency.
2. Develop and practice professional work habits and appropriate interpersonal relationships with patients and other members of the health care team.
3. Acquire a complete knowledge of sonographic findings and features of disease entities enabling him or her to produce and evaluate studies of diagnostic quality.
4. Develop a basic knowledge of disease entities enabling him or her to evaluate pertinent clinical data.
5. Gain expertise in the application of ultrasound principals, instrumentation, and scanning technique proficiency.

## CLINICAL OBJECTIVES

### The student will:

1. Demonstrate knowledge and application of ergonomic techniques.
2. Demonstrate knowledge and application of types and methods of infection control.
3. Demonstrate knowledge and application of patient care.
4. Demonstrate comprehension and application of medical ethics and law.
5. Demonstrate comprehension and application of medical and sonographic terminology.
6. Obtain, interpret, document, and communicate relevant information related to sonographic examinations.
7. Demonstrate awareness of roles and responsibilities of healthcare professions to effectively communicate and collaborate in the healthcare environment.
8. Identify and evaluate anatomic structures.
9. Demonstrate knowledge of clinical disease processes with application to sonographic and Doppler patterns.
10. Demonstrate knowledge, comprehension, and application of image production and optimization.
11. Demonstrate knowledge, comprehension, and application of biological effects.
12. Demonstrate performance of clinical competencies.

## ABDOMINAL CONCENTRATION

1. Identify anatomy, relational anatomy, anatomic variants, and sonographic appearances of normal anatomical structures.
2. Demonstrate knowledge of the physiology, pathophysiology, sonographic techniques, measurements, sonographic appearances, and Doppler patterns in both normal and abnormal structures.
3. Demonstrate knowledge in sonographic guided procedures.
4. Evaluate scanning protocol and modifications based on the sonographic findings and the differential diagnoses.
5. Performance of clinical competencies.
6. Demonstrate proficiency in the technique and applications.

## **OBSTETRICS AND GYNECOLOGIC CONCENTRATION**

1. Identify anatomy, anatomic variants, and sonographic appearances of normal structures of the female pelvis.
2. Identify anatomy, anatomic variants, and sonographic appearances of normal maternal, embryonic, and fetal anatomic structures during the first, second and third trimesters.
3. Demonstrate knowledge of pathology, physiology, pathophysiology, sonographic technique, measurements, sonographic appearances, and Doppler patterns in gynecologic disease processes.
4. Demonstrate knowledge of pathology, physiology, pathophysiology, sonographic technique, sonographic appearance, measurements, and Doppler patterns in obstetric abnormalities.
5. Demonstrate knowledge and understanding of the role of the sonographer in performing interventional/invasive/advanced procedures.
6. Evaluate scanning protocol and modifications based on the sonographic findings and the differential diagnoses.
7. Demonstrate clinical competency through performance of sonographic examinations of sonographic examinations of the gravid and non-gravid pelvis with both transabdominal and endocavitary transducers, and Doppler/M-mode display modes, according to practice parameters established by national professional organizations and the protocol of the clinical affiliate/clinical education centers.
8. Demonstrate performance of clinical competencies.

## **ADULT CARDIAC CONCENTRATION**

1. Identify anatomy, anatomic variants, and sonographic appearances of normal cardiac structures.
2. Demonstrate knowledge of normal and cardiovascular physiology and hemodynamics.
3. Demonstrate knowledge of mechanisms of disease, cardiovascular pathophysiology and hemodynamics, sonographic technique, measurements, quantitative principles and Doppler patterns in both the normal heart and with cardiac disease.
4. Demonstrate knowledge and applications of the indications, utility, limitations, and technical procedures for related echocardiographic studies.
5. Demonstrate knowledge, application, and proficiency in the use of quantitation principles applied to echocardiographic images and flow data.

6. Awareness of scanning protocol and modifications based on the sonographic findings and the differential diagnoses.
7. Demonstrate performance of clinical competencies.
8. Demonstrate proficiency in technique and applications.

### **VASCULAR CONCENTRATION**

1. Demonstrate knowledge of anatomy and anatomic variants of the cardiovascular system.
2. Demonstrate knowledge of normal and abnormal peripheral vascular physiology and hemodynamics.
3. Demonstrate knowledge of mechanisms of vascular diseases, vascular pathophysiology, and hemodynamic effects.
4. Demonstrate knowledge of sonographic appearances, sonographic techniques, measurements and Doppler flow characteristics in both normal and abnormal vascular structures.
5. Demonstrate knowledge physiologic vascular testing principles and techniques.
6. Demonstrate knowledge and application in the use of quantitative principles applied to vascular testing.
7. Demonstrate knowledge in ultrasound guided procedures.
8. Demonstrate knowledge of the role of ultrasound for evaluation of vascular surgical procedures or interventions, including role in planning, intra-procedural guidance/technical evaluation, and/or post-procedure assessment.
9. Evaluate scanning protocol and modifications based on patient specific factors.
10. Demonstrate knowledge and application of quality assurance and statistical tests used in a vascular laboratory.
11. Demonstrate performance of clinical competencies.
12. Demonstrate proficiency in technique.

#### **The student will, in a clinical situation, and given a patient:**

1. Evaluate the requisition to determine the sonographic area of interest.
2. Review the patient's chart or question the patient to further determine the area of sonographic interest and the sonographic differential diagnosis.
3. Enter all pertinent data into department logbook if applicable.

4. Follow proper precautions for isolation patient, if necessary.
5. Introduce self to patient and explain the examination, utilizing the AIDET system.
6. Verify correct identification of patient.
7. Verify correct preparation, if any, of the patient.
8. Prepare sonographic equipment including patient identification and scanning presets.
9. Assist patient to examination room.
10. Have patient properly gowned.
11. Assist patient onto scanning table.
12. Correctly position patient and immobilize as necessary.
13. Keep patient covered for privacy.
14. Talk with patient in gentle manner.
15. Give proper instructions for moving and breathing.
17. Prepare hard copy recording device, if applicable.
18. While scanning the patient, the student will learn to further adjust the gain controls, manipulate technical functions, and produce optimum images of pertinent anatomy and pathologic conditions.
19. Manipulate PACS system to view and manipulate images.
20. Participate in any report/prelim or tech sheet for interpreting physician.
21. Check images with interpreting physician and/or supervising sonographer and discuss the images taken, areas of improvement, strengths, and differentials.
22. Assist patient from scanning cot.
23. Properly route patient to dressing room (changing area).
24. Ensure that patient is transported out of department.



## HOW TO SUCCEED IN YOUR DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

1. Be organized:
  - a. Take responsibility for your own education. You will see things in clinical rotations we may not have covered in didactic classes. Look it up, ask questions, be prepared to learn.
  - b. Keep a calendar and write due dates down.
  - c. Keep weekly checklist of all items in your class, didactics and personal life that must get done.
  - d. Keep organized.
  - e. Don't throw anything away. What you are given today, we will build upon tomorrow.
2. Don't worry so much on grades, as the comprehension of the work completed.
3. Study every day. Don't wait to study right before a quiz or site visit.
4. Make flashcards, or scan cards. Keep in mind, this is not memorization, this is for comprehension. You will need to know facts and a lot of them. You will also need to know how "pieces" of information fit into a diagnosis.
5. Utilize concept mapping.
6. Form a study group.
7. ASK for Help.
8. BE ON TIME.
9. Make your learning environment a priority. NO cell phones, social media activity, online shopping, messaging/texting during lectures, homework time, or clinical rotations. Laptops are to be used in class for the sole purpose of note keeping. Laptops in clinical are prohibited, bring paperwork or books to review during down time. These devices may be used during lunch periods.
10. Understand the DMS Handbook and the Clinical Syllabus.
11. BE PROACTIVE. Ask to scan, do not wait for a sonographer to ask you to scan.
12. Utilize open scan lab when available.
13. Clinical instructors are not your "teacher", they are mentors. Their responsibility is not your learning, they are responsible to the facility and to the patients that they serve. It is an honor and a privilege that they are willing to take time out of their schedules to help you be successful. KEEP THIS in mind ALWAYS.
14. And remember: Quitters never win, winners never quit. To achieve the end goal, you must put in the work.

### **CLINICAL CURRICULUM: Abdomen Extended – Juniors**

Summer Semester 2023	DMS 131 - 3 credits
Fall Semester 2023	DMS 232 - 4 credits
Spring Semester 2024	DMS 233 - 4 credits
Summer Semester 2024	DMS 234 - 4 credits

### **CLINICAL CURRICULUM: Adult Echocardiography - Juniors**

Summer Semester 2023	DMS 131 - 3 credits
Fall Semester 2023	DMS 232 - 4 credits
Spring Semester 2024	DMS 233 - 4 credits
Summer Semester 2024	DMS 234 - 4 credits

### **CLINICAL CURRICULUM: Abdomen Extended - Seniors**

Summer Semester 2022	DMS 131 - 3 credits
Fall Semester 2022	DMS 232 - 4 credits
Spring Semester 2023	DMS 233 - 4 credits
Summer Semester 2023	DMS 234 - 4 credits

### **CLINICAL CURRICULUM: Adult Echocardiography - Seniors**

Summer Semester 2022	DMS 131 - 3 credits
Fall Semester 2022	DMS 232 - 4 credits
Spring Semester 2023	DMS 233 - 4 credits
Summer Semester 2023	DMS 234 - 4 credits

## Lab Proficiencies completed throughout the program:

### **Abdomen:**

- Aorta
- IVC
- Liver
- Biliary System/Gallbladder
- Pancreas
- Kidneys
- Spleen
- Bladder
- GI tract
  - Appendix
  - Pyloric Stenosis
- Non-Cardiac Chest (Pleural Fluid)
- Lung
- Thyroid
- Scrotum
- Abdominal wall (Hernia)
- Breast
- Extremity Soft Tissue (Foreign Body)
- Superficial and subcutaneous tissue
- Musculoskeletal structures
  - Shoulder
  - Knee
  - Achilles
- Abdomen Complete
- Abdomen Limited (RUQ)
- Renal

### **Lab Proficiencies that must be completed for OB/GYN:**

- Transabdominal Pelvic (non-gravid)
- Transvaginal Pelvic (non-gravid): PHANTOM – in lab
- Simulated 1st Trimester (written)
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Position and Maternal Cervix
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Amniotic Fluid
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Maternal Adnexa
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Placenta
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Umbilical Cord
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Abdomen and Abdominal Wall
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Extremities
  - Upper Extremities
  - Lower Extremities
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Brain
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Spine
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Face and Neck

- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Thoracic Cavity and Heart w/ cardiac activity
- 2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Urogenital System

**Lab Proficiencies** that must be completed for **Adult Cardiac**:

- Transthoracic Parasternal Long
- Transthoracic Parasternal Short
- Transthoracic Complete
- Apical 4 Chamber
- Apical 5 Chamber
- Apical 2 Chamber
- Apical 3 Chamber
- Subcoastal Views
- Suprasternal
- Right Ventricular Inflow
- Right Ventricular Outflow

**Lab Proficiencies** that must be completed for **Vascular (Abdomen Extended and Cardiac)**:

- Aorta-Iliac Duplex
- Liver Doppler
- Mesenteric Artery Duplex
- Iliac Veins/IVC Duplex
- Renal Artery Duplex
- Peripheral Lower Venous Duplex (Arterial and Venous)
- Peripheral Upper Venous Duplex (Arterial and Venous)
- Transcranial Doppler (TCD)
- Allen’s Test
- Vessel Mapping
- ABI
- Segmental Pressures w/o exercise
- Segmental Pressures w/ exercise
- Thoracic Outlet Syndrome

### Lab Tracking Sheets

**Abdomen Extended Program:**

Study	Attempt 1	Attempt 2	Attempt 3	Lab Proficiency
Aorta				
IVC				
Liver				
Biliary/GB				

Pancreas				
Kidneys				
Spleen				
Bladder				
RUQ				
Abdomen Complete				
Renal				
GI – Pyloric Stenosis				
GI – Appendix				
Non-Cardiac Chest (Pleural Fluid)				
Lung				
Thyroid				
Scrotum				
Abdominal wall				
Breast				
Extremity Soft Tissue (Foreign Body)				
Superficial and subcutaneous tissue				
Musculoskeletal structures Shoulder				
Musculoskeletal structures Knee				
Musculoskeletal structures Achilles				
<b>Vascular Proficiencies</b>				

Aorta Duplex				
Liver Doppler				
Mesenteric Artery Duplex				
Iliac Veins/IVC Duplex				
Renal Artery				
Peripheral Lower Venous Duplex				
Peripheral Lower Arterial Duplex				
Peripheral Upper Venous Duplex				
Peripheral Upper Arterial Duplex				
TCD				
Allen's Test				
Vessel Mapping				
ABI				
Lower Segmental Pressures w/o Exercise				
Lower Segmental Pressures w/ Exercise				

Thoracic Outlet Syndrome				
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**Cardiovascular Program:**

<b>Study</b>	<b>Attempt 1</b>	<b>Attempt 2</b>	<b>Attempt 3</b>	<b>Lab Proficiency</b>
Transthoracic Parasternal Long				
Transthoracic Parasternal Short				
Transthoracic Complete				
Apical 4 Chamber				
Apical 5 Chamber				
Apical 2 Chamber				
Apical 3 Chamber				
Subcoastal				
Suprasternal				
Right Ventricular Inflow				
Right Ventricular Outflow				

<b>Vascular Proficiencies</b>				
Aorta Duplex				
Liver Doppler				
Mesenteric Artery Duplex				
Iliac Veins/IVC Duplex				
Renal Artery				
Peripheral Lower Venous Duplex				
Peripheral Lower Arterial Duplex				
Peripheral Upper Venous Duplex				
Peripheral Upper Arterial Duplex				
TCD				
Allen's Test				
Vessel Mapping				
ABI				
Lower Segmental Pressures w/o Exercise				



Lower Segmental Pressures w/ Exercise				
Thoracic Outlet Syndrome				

**Obstetrical and Gynecology Lab Proficiencies:**

<b>Study</b>	<b>Attempts and Proficiency Dates/Initials</b>			
	<b>Attempt 1</b>	<b>Attempt 2</b>	<b>Attempt 3</b>	<b>Proficiency</b>
Transabdominal Gyn (Non-Gravid)				
Transvaginal GYN (Non-Gravid) PHANTOM				
1st trimester simulated (written)				
<b>Study</b>	<b>Date of Proficiency with Volunteer or Phantom. Clinical Coordinator Initials.</b>			
	<b>Attempt 1</b>	<b>Attempt 2</b>	<b>Proficiency</b>	
Maternal Cervix/Fetal Position				
Maternal Adnexa				
Placenta				
Amniotic Fluid				
Umbilical Cord				
Fetal Extremities (Upper)				
Fetal Extremities (Lower)				
Fetal Spine				

Fetal Face and Neck			
Fetal Brain/Head			
Fetal Abdomen/Abdomen Wall			
Fetal Urogenital System			
Fetal Thoracic Cavity Heart views and cardiac activity included			

## **DMS 131 – Clinical Education I**

Learning ultrasound duties with work toward first lab proficiencies. Learning complete exams and ultrasound protocols. Applying organ-specific scanning from DMS 101 into DMS 131. Laboratory: minimum of 16 hours/week.

### **Expectations of student:**

1. Moving from organ specific to exam specific proficiencies in the lab: student may still be working at a slower pace. Students may need guidance in scan ability. Expectations are the student will be slow in the beginning of the semester and will improve over this semester.
2. Learning ultrasound protocols
3. Learning patient preparation for sonographic procedures
4. Obtaining history
5. Stocking rooms with linen and gel
6. Maintaining a clean work environment.
7. Proper use of ergonomics.
8. Proper use of Personal Protective Equipment and infection control.
9. Emotional intelligence

### **Will need assistance in:**

1. Image Optimization techniques
2. Documenting sonographic findings
3. Finalizing exams for permanent storage
4. Processes for reporting of critical findings

Successful Completion of this course includes lab assignments which must have a grade of above **80%**.

## **DMS 232 – Clinical Education II**

Observation of all ultrasound duties with work towards lab exam proficiencies and 1/3 clinical competencies assigned by instructor. This may include on campus labs, private office settings, as well as hospital rotations. Prerequisite: Completion of DMS 131. Laboratory: minimum of 24 hours/week.

### **Expectations of student:**

1. Moving onto new ultrasound examination proficiencies, gaining confidence and speed in previous studies.
2. Transporting of patients to and from ultrasound rooms.
3. Preparing patients for the sonographic procedure.
4. Obtaining history
5. Stocking rooms with linen and gel
6. Maintaining a clean work environment.
7. Proper use of ergonomics.
8. Proper use of Personal Protective Equipment and infection control.
9. Demonstrate proper professionalism and maintain medical ethics by abiding all laws, including HIPAA, patient rights, informed consent, etc.
10. Applying what they have learned in lab to the clinical setting.

11. Students are to remember that it is their responsibility to keep track of their competencies, and to make clinical staff aware when they are ready to comp on an exam **at the start of that clinical day**.
12. Any competencies you perform at a clinical site must be in Trajecsys before the end of your rotation.
13. Students in Abdomen Extended and Echo need to complete at least **1/3 of the required clinical competencies by the end of this semester**. Completion of these competencies contributes to **25%** of the clinical grade. This is graded as (number of completed competencies) ÷ (number of minimum competencies required for the semester). If students complete more than the minimum amount of competencies, they will receive a 100% for this grade, no higher. If the student observes  $\geq 30\%$  of exams rather than scans, this could result in a grade reduction of 10%.

**Will need assistance in:**

1. Image Optimization techniques
2. Documenting sonographic findings
3. Finalizing exams for permanent storage
4. Processes for reporting of critical findings

Successful Completion of this course includes lab assignments which must have a grade of above **80%**. Successful Completion is also dependent upon clinical site evaluation of behavior and engagement, work completed, and site visit grade.

**DMS 233 – Clinical Education III**

Observation and practicum of all clinical duties performed in the ultrasound department. May include experiences in abdominal, pelvic, obstetrical, and small parts scanning, as well as pediatric, cardiac and vascular sonography. Prerequisite: Completion of DMS 232. Laboratory: minimum of 24 hours/week.

**Expectations of student:**

1. All above mentioned within DMS 232.
2. Students are to remember that it is their responsibility to keep track of their competencies, and to make clinical staff aware when they are ready to comp on an exam **at the start of that clinical day**.
3. Any competencies you perform at a clinical site must be in Trajecsys before the end of your rotation.
4. Students are expected to complete **at least 2/3 of total competencies (cumulative)** of the required competencies during this semester. Completion of these competencies contributes to **25%** of the clinical grade. This is graded as (number of completed competencies) ÷ (number of minimum competencies required for the semester). If students complete more than the minimum amount of competencies, they will receive a 100% for this grade, no higher. If the student observes  $\geq 20\%$  of exams rather than scans, this could result in a grade reduction of 10%.

Successful Completion of this course includes lab assignments which must have a grade of above **80%**. Successful Completion is also dependent upon clinical site evaluation of behavior and engagement, work completed, and site visit grades.

## DMS 234 - Clinical Education IV

Practicum in all clinical applications of ultrasound in the areas of abdominal, pelvic, obstetrical and small parts scanning to include pediatric patients, cardiac and vascular. Prerequisite: Completion of DMS 233. **Completion of all lab proficiencies.**

Expectations of student:

1. By the end of this semester, students should be entrusted by staff to run a room solo on exams they have completed competencies on, with only a second glance at the patient by the sonographer, to ensure the student did not neglect anything within the scan.
2. Students should be proficient in any area of abdominal, pelvic, obstetrical, and small parts scanning to include pediatric patients. This should be apparent with the competencies when the clinical coordinator visits the site to assess the student.
3. Students are to remember that it is their responsibility to keep track of their competencies, and to make clinical staff aware when they are ready to comp on an exam **at the start of that clinical day.**
4. Any competencies you perform at a clinical site must be in Trajecsys before the end of your rotation.
5. **All competencies must be completed before the end of DMS 234.**
  - a. **Failure to complete clinical competencies may result in delayed graduation or dismissal from the program.**
  - b. If the student observes  $\geq 10\%$  of exams rather than scans, this could result in a grade reduction of 10%.

### CLINICAL RULES and RESPONSIBILITIES FOR STUDENTS

Students are entering the profession of Diagnostic Medical Sonography and must understand that they are entering a field of medicine that requires professional standards that other career choices may not have to adhere to. Such standards are listed below to ensure confidence in the field of study. Any disregard for these standards by the student, should be clearly documented and sent to the clinical coordinator for evaluation.

1. Students will understand there is a limit to the number of hours a student may be absent from the clinical site. ANY absences more than the allowable amount will result in an "unsatisfactory" clinical day, in which three "unsatisfactory" days will turn into a failing clinical grade. Failing clinical grades result in dismissal from the program. If the student must call in sick, it is expected by the student to contact the Clinical Coordinator, and the clinical site, making sure to talk directly to the individual who is responsible for the student. Calling out of clinical must be done at least 30 minutes before expected clock-in time.
2. Clinical site rotation assignments are not made based on where the student lives but on DMS program and accreditation requirements. The student will report as requested.
3. The clinical site may be up to 2 hours from school campus each way.
4. The student may be scheduled for day and/or evening shifts and will report as assigned.
5. The students will adhere to the dress code policy; will be neatly groomed with scrubs neat in appearance. Students who report to their clinical site assignment appearing disheveled will be sent home by the clinical instructors, and *this will result in potential dismissal from the program.* Students sent home will meet with the clinical coordinator as soon as

possible, and discuss whether 5 point deduction to clinical grade is necessary for the dismissal reasoning.

- a. See Clinical Dress Code Section in this handbook for details on proper dress.
6. Students are expected to arrive **on time** to the clinical site rotation. If a student is consistently clocking in late this could result in a grade reduction, with possible dismissal from the program. See Clinical Absence section on page 35 for more information on attendance and grading.
7. Students will not mistreat patients in any manner (physical, verbal, etc.) including abandonment.
8. Students will not misuse confidential information, falsification of information, records and/or reports. This includes HIPPA violations regarding names of patients on images turned in for classroom case studies.
9. There will be no exhibition of insubordination, including refusal to attend a clinical site for any reason, or argumentative behavior towards clinical staff.
10. There will be no tolerance for gossip. Remember, this is a job interview, respect the authority at your site.
11. There will be no degenerate and indecent behavior.
12. There will be no damage or destruction (misuse, etc.) to institutional property, including defamation of character (patient, fellow student, clinical instructor, staff, administration, clinical coordinator, program director, et al.)
13. The students will not create or contribute to unsanitary conditions on clinical affiliates grounds, including exam rooms, dining areas, etc.
14. There will be no intimidation or coercion of another student or employee through physical, verbal and/or psychological (implied) threats.
15. There will be no possession of a weapon of any kind while on hospital premises or clinical affiliate's grounds.
16. Unauthorized use of any communication devices within the clinical affiliate premises will not be tolerated. (Cell phones will not be set in an audible mode during clinical, class or laboratory sessions).
  - a. Phones are to be kept away while at clinical. You may use them during lunch breaks. It is allowed to keep them on your person in case of an emergency (such as fire, dangerous persons).
  - b. Laptops or tablets are not allowed in the clinical setting. Students may use paper or book resources during clinical downtime.
17. Student sonographers share equal responsibility with the faculty and staff sonographers in the welfare of patients. Teamwork is essential and vital to give the patients the best possible diagnostic sonography service.
18. Students DO NOT have the right to refuse the assignments by the Program Director, Clinical Coordinator, or the clinical instructor.
  - a. Family and work are not an excuse to refuse a site. This program and your clinical time come first, you must adjust your schedule around clinical.
19. Students are responsible for keeping track of their logs, updating weekly before the Sunday of the following week.
20. Students are to keep track of their competencies. You are responsible for making sure clinical staff at your sites know to put your competencies in Trajecsys. It is not the responsibility of the clinical coordinator to track down each exam and sonographer you performed a competency with.

- a. Inform them you are completing a competency the day of, when an exam that matches your competency is ordered you take that patient and scan with the sonographer present, or they may evaluate your images after then back-scan.
  - b. The sonographer then writes a competency sheet regarding your exam. A paper copy can be found on pages 61 and 62 in this book. They must fill out a competency form on Trajecsys regardless of if you did a 'good' job or not! Feedback is necessary for your growth.
  - c. They enter this sheet in Trajecsys when time allows. The paper is for their convenience, the clinical coordinator will only accept competencies submitted on Trajecsys.
  - d. Make sure to check in and *communicate* with the sonographers you are with. These are your exams, make sure to follow through and see that they are put in Trajecsys.
    - See page 76 for a copy of the clinical competency log that will be used at your clinical sites. These should be kept in a binder or at the technologist's desk for all students at that site to use as a tracker for the sonographers.
21. Any competencies you perform at a clinical site **must** be in Trajecsys before the end of your rotation. There will be no back-logging once you have left a site. It is not the coordinator's responsibility to contact your clinical sites to put in competency forms in Trajecsys. You must remind them when you see them if it has been over one week since you completed the competency.

### Clinical Participation

Students are expected to perform the tasks outlined under expectations of the student for all clinical courses. Students are expected to help clinical staff without being asked. This includes cleaning rooms, stocking supplies, transporting patients. Students are to go to clinical each day prepared to scan. The clinical staff are not responsible for asking students to scan, students must be proactive and ready to scan without being asked. If there are patients, students need to be with the sonographer and that patient. Students are not to 'stand back' and observe sonographer tasks. Ask how you may help if you do not know what the next goal is. Any student not participating in student duties during clinical will meet with the coordinator and discuss becoming more proactive within the site. Lack of teamwork in the clinical site by the student will result in a 5 point reduction to clinical grade. If the behaviors continue, the student will meet with the Director and Clinical Coordinator.

Students not prepared for clinical or not participating in clinical tasks may be dismissed by the clinical preceptor and receive an unexcused clinical day. The clinical preceptor will file a **Sonography Program Affective Domain Performance Notification Form** and the student will be given a time and day to meet with the Clinical Coordinator to discuss the reasoning for the dismissal.

## **DMS PROGRAM AFFECTIVE DOMAIN PERFORMANCE NOTIFICATION FORM**

Students may be dismissed from clinical site for any of the above-mentioned activities/behaviors and will result in an “unsatisfactory” clinical day. Three “unsatisfactory” days will result in failure of the clinical grade.

### **Sonography Program Affective Domain Performance Notification Form**

**Student name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Clinical site:** \_\_\_\_\_

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

**Compliance with College, Program, and/or Clinical Affiliate Policies and Procedures:**

- Clinical site and Sonography Program Rules and Procedures:**
- Patient Safety:**
- Unprofessional Practice/Behavior:**
- HIPPA Violation:**
- Clinical Appearance:**

**Today you were not:**

- Prepared to scan:**
- Able to follow verbal instructions to improve scanning performance:**
- Able to apply didactic knowledge to clinical practice:**
- Other:**

**COMMENTS:**

**Clinical Instructor Signature:**

\_\_\_\_\_

**Clinical Coordinator Signature:**

\_\_\_\_\_

**Student Signature:**

\_\_\_\_\_

**Meeting held on:**

\_\_\_\_\_



## COURSE OUTLINE

### I. Guidelines on things to know

1. Location of crash cart, fire extinguisher, oxygen, suction, and hospital emergency code
2. State names of radiologists and supervisor and sonographers
3. Description of Ultrasound Department layout
4. Description of hospital/clinic layout
5. Use of departmental procedure manual and protocol manual
6. Location of wheelchairs and stretchers, demonstration of proper body mechanics to be used in transporting patients and explanation of patient room numbering system
7. Describe the flow pattern of the requisition
8. Describe procedure for logging patients
9. Evaluate ultrasound request forms
10. Review procedure for documenting ultrasound findings
11. Review of patients charts/scanning protocols

For each of the following exams student should obtain patient history, preparation for exam and pertinent lab values and data. Student must also know and understand scanning protocol for each of the following clinical examinations. Any examination with an **M** next to it is *mandatory* for graduation.

### **Clinical ABDOMINAL Competency** ultrasound exams.

1. Aorta and branches **[M]**
2. Abdomen Complete **[M]**
3. RUQ **[M]**
4. Renal (including Bladder) **[M]**
5. Scrotum **[M]**
6. Thyroid/parathyroid **[M]**
7. Non-Cardiac Chest (finding Pleural Fluid) **[M]**
8. Interventional procedure/Invasive procedure/therapeutic procedure **[M]**
9. Abdominal wall (Hernia)
10. Gastrointestinal tract (pylorus or appendix)
11. Lung
12. Extremities non-vascular
13. Infant hips
14. Neonatal/infant head

- 15. Neonatal/infant spine
- 16. Penis
- 17. Prostate
- 18. Superficial soft tissue structures
- 19. Abdominal Vasculature (Abdominal Doppler)

**OBSTETRICS AND GYNECOLOGIC Competency Exams:**

- 1. Non-Gravid Transabdominal Pelvis [M]
- 2. Non-Gravid Transvaginal Pelvis [M]
- 3. First Trimester OB [M]
- 4. 2<sup>nd</sup> Trimester Anatomy Exam [M]
- 5. OB > 14 Weeks (non-Anatomy scan) [M]
- 6. Biophysical Profile [M]
- 7. Interventional Exam

\*There will be an OB list and attestation forms for you to complete separately from these mandatory competencies. This list is a breakdown of the components that make up a 2<sup>nd</sup>/3<sup>rd</sup> trimester anatomy scan. Once you complete these steps you may start your 2<sup>nd</sup>/3<sup>rd</sup> Trimester Anatomy Exam attempts and competency. This chart and attestation form can be found at the end of this handbook, pages 73-75.

**ADULT CARDIAC Competency Exams:**

***\*ALL CARDIAC COMPETENCIES ARE MANDATORY\****

**Competencies to be performed by the cardiovascular student:**

- Transthoracic echo: normal
- Transthoracic echo: Systolic dysfunction
- Transthoracic echo: Diastolic dysfunction
- Transthoracic echo: Aortic valve or aortic root pathology
- Transthoracic echo: Mitral valve pathology
- Transthoracic echo: Right heart pathology
- Transthoracic echo: Cardiomyopathy
- Transthoracic echo: Pericardial pathology
- Transthoracic echo: Prosthetic valve
- Transthoracic echo: Coronary artery disease
- Sterile technique

**Competencies that are to be observed by the cardiovascular student:**

- Stress echo: normal
- Stress echo: abnormal
- Transesophageal echo

- Intraoperative echo
- Contrast enhanced echo
- IV administration techniques
- 3-D echo
- Strain Echo
- Speckle tracing
- Cardiac ultrasound respirogram
- Pharmacological stress

#### **VASCULAR Competency Exams:**

1. ABI **[M]**
2. Aortoiliac Duplex **[M]**
3. Carotid **[M]**
4. Lower Extremity Arterial Duplex **[M]**
5. Upper Extremity Venous Duplex **[M]**
6. Lower Extremity Venous Duplex **[M]**
7. Lower Extremity Venous Insufficiency Testing **[M]**
8. Lower extremity and digital physiologic testing (VPR, segmental pressures, CW Doppler) **[M]**
9. Upper Extremity Arterial Duplex
10. Bilateral Brachial Blood Pressure Readings
11. Transcranial Doppler (not mandatory, but must be observed/scanned)
12. Upper extremity and digital physiologic testing (VPR, segmental pressures, CW Doppler)
13. Allen's Test
14. Lower Extremity Exercise Testing
15. Vessel Mapping
16. Renal Artery Duplex
17. Mesenteric/splanchnic Artery Duplex
18. Liver Doppler

# Sovah School of Health Professions

## Abdomen Extended DMS Mandatory Clinical Competency List

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

### ABDOMEN:

- Aorta
- Abdomen complete
- Abdomen limited (RUQ)
- Non-Cardiac Chest (finding Pleural Fluid)
- Thyroid
- Scrotum
- Renal
- Interventional Procedures (assisted)

### Date Completed:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### OB/GYN:

- Transabdominal Pelvic (non-gravid)
- Transvaginal Pelvic (non-gravid)
- First Trimester OB
- Biophysical Profile
- 2<sup>nd</sup> Trimester OB (Anatomy Exam)
- OB > 14 Weeks (non-Anatomy exam)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### VASCULAR:

- Aorta-Iliac Duplex
- Carotid
- Lower Arterial Extremity Duplex
- Lower Venous Insufficiency
- Upper Venous Duplex
- Lower Extremity Venous Duplex
- ABI's
- Lower extremity and digital physiologic testing

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Semester: \_\_\_\_\_

Clinical Coordinator: \_\_\_\_\_



## CLINICAL GRADING SYSTEM

To receive a grade for Clinical Education (clinic) students must complete certain objectives each semester.

The clinical grade is accomplished through a contractual agreement. Each carries a percentage which varies from semester to semester. Make sure you are aware of this grade scale each semester by reading the syllabus associated with that semester.

The specific parts which comprise the clinical grade are:

1. Competency Examinations
  1. Use of proper ergonomics
  2. Appropriate PPE and infection control
  3. Obtaining appropriate clinical history
  4. Appropriate communication with patient, sonographer and reading physician
  5. Image optimization techniques utilized
  6. ALARA
  7. Professionalism demonstrated
  8. Document appropriate sonographic findings
  9. Finalize the exam with storage techniques
  10. Process critical findings appropriately
2. Clinical Instructor Evaluations
3. Written competency assignments
4. Outside Diagnostic Medical Sonography involvement
5. Completed Paperwork – this included clinical orientation papers, vaccinations, clinical deadlines, journals, logs
6. Participation
7. Site Visit Evaluations by the Clinical Coordinator
8. Scan final examinations in the lab

### **Clinical Competency and Examination Attempts**

The student will begin his/her clinical participation by first assisting a practicing sonographer in the execution of his/her duties. This participation moves from a passive mode of observation to a more active mode. The rate of a student's progress is dependent upon the student's ability to comprehend and perform the various tasks assigned to his/her (behavioral objective accomplishments). As the student becomes experienced in given procedure(s), he/she gradually moves into an independent clinical performance stage. At this point, the student is performing the procedure under the direct supervision of a sonographer. This happens after a student has passed their competency for those specific procedures.

When the student can perform the procedure(s) at an acceptable level of performance, he/she may request to have an examination of clinical objectives in which he/she has the opportunity to demonstrate his/her skill and competency in that particular area of sonographic examinations. The student MUST have documented **three** prior completed exams before a competency evaluation will be conducted on any given examination. These prior attempts must be done independently without assistance from the sonographer, and without any additional 'missed' images taken by the sonographer. Once these attempts are completed the student will request a competency evaluation from his/her clinical instructor. If successful, the student must then perform an image evaluation of the examination with the clinical instructor to complete the competency examination. The clinical instructor who grades the competency for the student must have the proper testing credentials for the exam being graded. These credentials may be found on the clinical instructor credential list for the specific clinical site which will be given to the students at the beginning of each rotation. Only clinical instructors on this list with the proper testing credential can grade the competency. The clinical coordinator will double check the competency to ensure the name came from the list and has the appropriate credentials prior to acceptance of the competency. Upon the successful completion (pass) of each competency exam, ***the student will be allowed to perform all such examinations without direct supervision.*** A sonographer must still review the student's images and back-scan when applicable prior to the patient being released. The student will continue to practice these examinations while pursuing experience to apply for the next set of clinical competencies. If a student fails the competency evaluation, he/she will return to the clinical participation state for additional experience in that category of exams.

When the Clinical Coordinator performs the site visits to assesses the capabilities of the student performing a completed competency, if the student fails at the visitation, the Clinical Coordinator will **void the completed competency**. The student must complete another competency for the failed exam. **The site visit competency must meet the grade of 80% to be acceptable.**

### Clinical Grading

The grade scale for all DMS courses, Abdomen Extended and Cardiovascular, follow the scale below.

A = 94-100

B = 87- 93

C = 80-86

F = 79 and below

**Students must earn a 'C' grade or higher in all courses to pass the program and graduate. Transfer credits with an average of 'C' or above are accepted during the application period.**

**Additional participation which is strongly encouraged:**

1. The student should join either SDMS or AIUM, with an approximate cost of \$40. Applications can be found on the appropriate web site.

The American Institute of Ultrasound in Medicine

14750 Sweitzer Lane, Suite 100

Laurel, MD 20707-5906

(301) 498-4100

[www.aium.org](http://www.aium.org)

The Society of Diagnostic Medical Sonography

12770 Coit Road, Suite 508

Dallas, TX 75251

1-800-229-9506

(214) 239-7379

[www.sdms.org](http://www.sdms.org)

The Society of Vascular Ultrasound

4601 Presidents Dr # 260,

Lanham, MD 20706

(301) 459-7550

[www.svunet.org/](http://www.svunet.org/)

The American Society of Echocardiology

2100 Gateway Centre Blvd # 310,

Morrisville, NC 27560

(919) 861-5574

<https://asecho.org/>



## CLINICAL DRESS CODE

Student must wear clean scrubs in the designated school color. A lab coat is required for graduation pinning, please also purchase a white lab coat. This can be worn during clinical if a student is cold.

Students will be neatly groomed with scrubs neat in appearance. Students who report to their clinical site assignment appearing disheveled will be sent home by the clinical instructors, and *this will result in potential dismissal from the program*. The clinical coordinator will also assess the student's appearance in clinical and correct/dismiss as needed during site visits.

- 1) No adornment of excessive or strong perfumes or colognes.
- 2) Students are also expected to adhere to clinical affiliates dress and appearance rules and regulations.
- 3) No fake fingernails, natural nails must be no longer than fingertip length. No chipped nail polishes.
- 4) No offensive tattoos that are not covered.
  - i. Offensive tattoos include, but are not limited to;
    - a. Hate against race, sexual orientation, or religion
    - b. Sexual images or words
    - c. Foul language
    - d. Symbols or images related to criminal actions/affiliation
- 5) Earrings must remain small, no large hoops or earrings that dangle.
- 6) Body piercings should be minimal in the clinical setting. Excessive facial piercings will not be tolerated. Clear or flesh-colored retainers may be placed while in clinical.
- 7) Male students should be clean shaven, mustaches and beards neatly groomed.
- 8) Hair is to be pulled back and secured if longer than shoulder length.
- 9) Shoes must be non-slip, secure, and enclosed. No ventilated shoes or shoes with holes, such as crocs.
- 10) Clinical sites may be cold. Wear your lab coat or a black long sleeve shirt under your scrubs. No hoodies may be worn during clinical. A black or white lab-coat like jacket is allowable, it must be logo and design free, and free of holes/stains. It must be well fitted, and the arms must not extend past the wrist.
- 11) Students should wear uniforms in all clinical areas.
- 12) Remember- if you are asked not to wear something again by clinical or program staff **do not wear it again.**

Students will respect these rules and abide by them. If a student is seen or reported to not follow these rules, they will have 5 points taken from their clinical site visit grade and/or clinical grade. Any student found in violation of the clinical dress policy will be sent home and the day counted as an unexcused absence.

## CLINICAL SITE PARKING

For Sovah facilities students will receive a parking sticker for their vehicle. As long as you are parked in the proper location, you should not have any parking fees at Sovah clinical sites. Other clinical sites may have parking fees. Students need to be aware of this and be prepared to pay parking in the event they are charged. The school does not cover parking fees in non-Sovah clinical sites.

## CLINICAL ABSENCE POLICY

100% attendance is expected during clinical rotations. Refer to the DMS Student Handbook for further policies regarding absences and tardiness to clinical and class. You must notify the DMS Clinical Coordinator **and** the clinical site no later than 30 minutes prior to the starting time for that clinical rotation during *emergencies or sickness*. It is expected that non-emergent missed days, such as doctor appointments, be scheduled on days when you are not in clinical. If you must miss clinical and are aware of it, please give the clinical coordinator and clinical site notification **a week** in advance. Failure to provide adequate notice will result in an unapproved missed clinical day if the student chooses to continue with the absence. Exceptions may be made in extenuating circumstances and will be considered on a case-by-case basis.

The student is responsible for submitting a clinical absence form **one week after the absence** to the Clinical Coordinator. Failure to do so will result in 5-point reduction to the clinical grade, with the expectation that the time will still be made up before the end of that rotation. The student is responsible for working with the Clinical Coordinator and Clinical Instructor to coordinate make up days. These times and dates must be approved by the DMS Clinical Coordinator. A clinical make up form will be filled out by the student and signed by the sonographer when the absence is made up. The completed form will be turned in to the Clinical Coordinator. Any absences that are not made up by the end of the semester will result in a 5-point reduction of the clinical grade for *each* absence. All absences must be made up prior to graduation in order to graduate.

Absences must be made up at the clinical site the student was absent from unless otherwise approved by the clinical coordinator.

\*Students may not make up clinical time during breaks between semesters, holidays, or weeks off for holidays. There are days during the semester available to you for make-up days, do not consider these breaks as an option for makeup time.\*

More than two consecutive sick days requires a physician's note. Failure to provide a physician's note within one week of the absence will result in a 5-point reduction to the clinical grade.

Students who are going to be tardy to clinical must notify the clinical coordinator and assigned clinical facility of the anticipated arrival time. Three tardies are equal to one unexcused (unsatisfactory) absence. 3 unsatisfactory days results in dismissal from the program. The third (3rd) absence will result in a reduction of final course grade by five (5) points for each missed day. Each additional absence will result in a further reduction by five (5) points, all of which could result in the student's academic dismissal.

If you are tardy more than half the clinical day, this will count as an absence. Any missed hours will be made up.

If a student finds it unavoidable to be tardy, they should notify the clinical site as soon as possible. Extenuating circumstances will be considered by the program director. Failure to call BOTH the assigned clinical site AND the Clinical Coordinator due to an absence or tardy occurrence will result

in an additional deduction of points from the final grade tabulation (up to 5 points). These deductions are final.

Students may not change clinical sites at any time without the approval of the DMS Clinical Coordinator.

### CLINICAL RECORD KEEPING

Students are required to accurately record all their clinical exams on the “Clinical Procedure Record Sheet”, which are to be entered into Trajecsyst weekly. Successful completion of the clinical objectives includes sufficient experience in all examinations. The log sheet in Trajecsyst will be frequently checked to see that each student is receiving the appropriate experience. If sufficient experience is not being received, students may not be allowed to take clinical competency exams. Thus, the rate a student progresses will be slowed down.

The clinical phase of your education must provide a sufficient and well-balanced variety of sonographic examinations and equipment. This information must be recorded on your Procedure Records. The following percentages represent what we consider to be a well-balanced distribution of clinical material:

Abdomen Extended Program:

- 30% Abdomen
- 30% OB/GYN
- 30% Vascular
- 10% Superficial Structures, pediatrics, MSK and Procedures

Cardiovascular Program:

- 50% Echocardiography Procedures
- 50% Vascular Procedures

### EVALUATION OF STUDENT PERFORMANCE & ETHICS

Student performance will be evaluated at midterm and the last week of the semester.

A sample of the student “Performance and Ethics Evaluation” is provided in this document. It is the student’s responsibility to provide a copy of this evaluation form to their clinical site and request it to be entered into Trajecsyst. The clinical site will fill out this form and enter it into Trajecsyst, or directly enter it into Trajecsyst initially at their choosing. The paper form is not needed by the coordinator, only the Trajecsyst copy.

### WRITTEN ASSIGNMENTS

**Journals:** Due weekly. Journals are due by 11:59pm on Sunday. Please be sure to write about your week. Tell us about your successes, anything interesting you saw, items you need help with. Using only the number values to describe your week will result in a 0%. Write these journals in complete sentences, at least one sentence per section. All sections must be filed out.

**Log books:** It is important and mandatory to update your logs every week. Logs are due the Sunday (before 11:59pm) after the clinical week, same as journals. Be sure to write all exams you see and

scan in your notebook to enter later. It is very important that the clinical coordinator receives an accurate amount of logs for each student.

Abdomen Extended students: When logging OB studies that you partially scan, make sure to record what parts you scanned in the comments.

**Student Self-evaluations:** Self-evaluations are due every 2 weeks on the Sunday following the second week. For example; if your second clinical week ends on Friday the 14<sup>th</sup>, your self-evaluation would be due Sunday the 16<sup>th</sup> before 11:59pm. Please give details in this self-evaluation. Using only the number values to evaluate yourself or no full sentences will result in a 0%. All sections must be filed out.

### CLINICAL FORMS

Students must complete any clinical forms given to them by the clinical instructor by the provided deadline. Failing to do so will result in a 0% for the paper in the clinical gradebook for that semester. This is applied to *each* missed form. Forms turned in on time will be graded as a 100%. Forms turned in incomplete or incorrect will have a grade reduction up to 80%. These forms will need to be corrected before the deadline to prevent further grade reduction. Failing to turn in 3 or more clinical forms on time will result in **5 points** deducted from the final grade for the clinical course DMS 131, DMS 232, DMS 233 or DMS 234 depending on the semester. Each form turned in late past 3 late forms will be a 5-point reduction. For example, a that student turns in 5 forms late, will have three 0% grades in their clinical compliance grade as well as 15 points deducted from the final grade. These forms are important as they allow students to be at their assigned clinical site. Delaying these forms may result in unapproved clinical days, meaning students will be unable to be at their assigned clinical site. Remember, three unapproved clinical days results in dismissal from the program. Be wary of these deadlines, remember it is best to complete anything given by the clinical coordinator as soon as possible to avoid delays. BLS certification, PPD renewal, and vaccinations are considered clinical forms. Any document the Clinical Coordinator needs for the student to start and continue their clinical experience falls under clinical forms and clinical compliance. Forms are due by 9:00AM the morning of the due date. Submitting the form via email at 8:00PM would not be considered on time as the coordinator is unable to submit the form until the next day.

### CRITERIA FOR Competencies/Proficiencies

Sonograms are graded according to scan competency forms. All competency examinations are based upon program protocols.

1. Organ or area of interest.
  - a. Organ or area of interest is demonstrated in its proper anatomic presentation
  - b. Sonographic characteristics of normal anatomy are of proper gray scale values
  - c. Sonographic consistency of pathologic conditions and its relationship to normal anatomic structures is apparent.
2. Proper positioning and scanning procedure.

- a. Scans are performed in correct protocol sequence
  - b. Proper usage of the optimization functions of the machine were used to create a diagnostic image.
  - c. The area of interest is included in the image with surrounding anatomic landmarks to assist in orientation and to verify exact locations.
  - d. All routine patient positions and scanning planes were used.
  - e. Modification to protocols used as needed.
  - f. Measurements are appropriate.
  - g. Color Doppler, pulsed wave Doppler, M-Mode usage appropriate.
3. Proper Identification
    - a. Patient's name and number, hospital and date can be identified on the images.
    - b. Identification of the scanning planes and labeling of the organ or area of interest can be identified on the images.
4. Patient Care:
    - a. Use of ergonomics
    - b. Safety and infection control
    - c. Obtain clinical history and synthesize information appropriately
    - d. Appropriate communication
    - e. Image optimization
    - f. ALARA
    - g. Professionalism
    - h. Documenting sonographic findings for interpretation
    - i. Finalizing exam for permanent storage
    - j. Reporting critical findings as necessary

### TRAJECSYS

Trajecsys is our online clinical tracking system. Students are expected to utilize this system each day of clinical rotations.

All students must register into the system.

Before logging in, you must sign up. If you haven't yet registered, you must do so to gain access to the report system. Following registration, a faculty member will authorize your access to the **TRS**. Thereafter, you can log in by visiting [www.trajecsyst.com](http://www.trajecsyst.com) and selecting the [Log In](#) link on the top right, or by going directly to the log in page:

<http://www.trajecsyst.com/programs>

#### From the Trajecsyst website:

The Trajecsyst Report System (**TRS**) is designed to help both you and your supervisors follow your clinical progress. You will be able to record many of the things you do at clinical sites and your supervisors will be able to view them immediately, whereas with a paper-based system, it might take weeks for a faculty member to chart and know what you are doing.

Your supervisors at each clinical site may be able to review the procedures you report daily, as

well as approve your arrival and departure times. They may also file assessments of your performance which you and your faculty will be able to view online. In addition, you will be able to provide feedback to both faculty and site-based instructors on your impressions of each site you visit.

You may also be able to complete evaluations of sites, faculty or courses; some forms, such as absence requests can also be created if your program has implemented these.

You will be able to see the same data that you provide to your supervisors in report format. In summary, the Trajecsys Report System will provide you, your faculty, and your clinical supervisors with the ability to quickly understand how you are doing, and to identify any areas in which you may need assistance.

As a student, most programs will ask you to keep certain records online. They are:

**DAILY:**

**1) Clock in and out.** Each day that you go to a clinical site, you are required to file a "[Clock in](#)" when you arrive, and a "Clock out" when you leave.

**2) File daily logsheets.** These are records of all the procedures in which you participated during the day. You may complete these at different times during the day if you are able and have access to a computer, or you may file them online when you get home.

**PERIODICALLY:**

**3) File evaluations.** You may be asked to complete evaluations on your supervisors, the faculty, the sites you visit, or other things. Evaluations are configurable by each program and the frequency and manner in which you will complete them will vary. All evaluations will usually be found under the menu item "Evaluations", although your program also has the ability to rename this hyperlink. After completion of an evaluation, your identity will always be available to faculty, but may be hidden to site-based employees, or they may not see your evaluations at all. This depends on the choices of your program's administrators.

You will also be able to view your own records in different ways, view records related to your performance which are created by faculty and your clinical supervisors, and view or print out comp eval items for any procedure which has exam items.

## Clocking In and Out

Each day when you arrive and depart a clinical site, you must clock in on-site. There is a geo-tag with the coordinates of your location marked, so the clinical coordinator will know if you are in the right location when clocking in. When you change sites, remember to reset to the new site on this page; otherwise, your times will be recorded for the wrong location.

Remember to clock out on site as well. You

must be within the ultrasound department when clocking in and out for the clinical day. Clocking in or out of the department in a separate location (parking lot, on the highway, in a coffee shop, etc..) is academic dishonesty and will be resolved as such per the academic policy. After one occurrence you will receive a warning. Upon the second occurrence there will be a 10% reduction in your overall final clinical grade, with a missed clinical day. Any dishonest clock in/out punches past 2 occurrences will result in further missed clinical days. After four occurrences the student will have 3 unapproved missed clinical days, and a grade of 0% for their clinical course. This results in dismissal from the program.



## Forgetting to clock in/out

If the student forgets to clock in or out they must notify the clinical coordinator. Forgetting to clock in or out **more than 3 times a semester will result in 1 tardy and 5 points deducted from the clinical grade**. Further forgotten punches will accrue into tardies. Remember 3 tardies equals 1 unexcused clinical day. Do not forget to clock in and out.

## Daily Logsheet

After you are finished with your clinical day, you will report the procedures done during the day. Select the site, the category and specific procedure (major study area and skill). You may report your procedures intermittently during the day, or you may report them once you get home. Keep and save a paper daily logsheet to keep track so you may enter the studies you see later. This will act as an audit trail of specific procedures and will serve to assist you in remembering the data which you will input for the day. It is very important to accurately enter all exams you observe and scan. *This is a part of your grade as well as part of your graduation requirements.* Make sure to report pathologies, the supervising employee you were with, and time of the procedure when logging.

\*Site: Elliot Hospital  
 \*Major Study Area: Ob-Gyn  
 \*Skill: Multiple Gestation  
 \*Participation Level: Assisted  
 Amount: 1  
 Repeats: 0  
 Key: JK226  
 \*Date: 04/12/2011  
 Reset records date  
 Pathology: None  
 Supervising Employee (New Edit Add Email Delete ): BLANTON, DESIREE  
 Total spent time for reported amount: 0:30  
 Hours:   
 Minutes:   
 Submit

Reported since program entry: 111  
 Reported at current site: 16

### Reported for date 04/12/2011:

Key	Skill	Participation Level	Amount	Repeats	Supervising Employee	Supervising Employee Time	
LV233	Sonohysterography	Minimum Assistance	1	0	BLANTON, DESIREE	0:25	delete

Obstetrical students are to report what aspects of the OB exam they performed when reporting a partially scanned exam. For example: the student scans the fetal head during an anatomy scan. The student would then log this as a partial 2<sup>nd</sup> Trimester OB (Anatomy Scan) and in the comments report they scanned the fetal head.

**Site, Major Study Area and Skill** - After your first clock in is approved, your site location will be displayed automatically. If you forgot to switch sites when you reported your last clock in, then this site will now be incorrect. Select your "Major Study Area" and "Skill", usually the procedure.

***Make sure to check site location every time!!! When logging and clocking in.***

**Participation Level** - Participation levels help your clinical coordinator understand how you are progressing in your mastery of the steps involved in each procedure and will vary according to what your program wishes to designate as specific levels. In some cases, your clinical instructor will not be able to complete a competency evaluation for you on a specific procedure until you have logged the required number and level. Therefore it is important to log all exams and update every



week before the start of the next week (Sunday). Any days without logs will result in a grade of 0 for that day in your log grade.

**Levels used by the Sovah School of Health Professions Sonography Programs** – Three levels are used, and must be selected when logging exams.

*Participation Level 1:* Used when the student observes an exam, and does not scan.


*Participation Level 3:* Used when the student partially scans an exam, but does not provide a complete diagnostic exam on their own.

*Participation Level 5:* Used when the student completes an entire exam on their own, from start to finish. The student performs all tasks; confirming the order, transporting the patient, performing the exam in full, without the aid of a sonographer.

Once the student performs **three** complete exams at Level 5, they may then perform a competency exam for that specific exam.

**Amount** - You must report each exam separately, even if they are the same exam.

**Key** - Unique patient identifiers, such as medical record numbers, accession numbers, patient names, etc. - are not permitted in the Trajecsys Report System. Programs can, however, allow students to insert a "key" whatever combination of letters and numbers may be designated. For instance, a "key" could be the patient's first name initial and last name initial, plus the last 3 digits of the medical record number. Since only 5 letters/numbers are permitted, it really isn't long enough to be a "unique" identifier but coupled with other data available that is submitted on the logsheet, it's usually quite enough to identify which patient was seen if an audit trail is required. If a program **MUST** have medical record numbers associated with procedures - most don't - then we suggest that students keep a separate paper record containing the patient's name, MRN, and in many cases, the initials of the tech or supervisor at the time of the completed procedure, as some certifying bodies require these initials anyhow. Currently we do not utilize this feature on Trajecsys.

**Date** - If you are reporting procedures not completed on today's date, you must reset the date by clicking the datepicker  icon. You must also click "Reset Records Date". You may return to the logsheet at any time to add or delete procedures for any selected date. **MAKE SURE TO PUT THE CORRECT DATE WHEN BACK-LOGGING EXAMS.** Make sure the dates match the date the procedure was done, do not forget to change these dates as you log when applicable.

**Reset Records Date** - You can file logsheets from previous days. Select a date by clicking the calendar, then click this button. **You MUST click this button** after resetting the date before continuing!

**Pathology** - Pathologies can be reported by enabling Pathologies from the Admin Panel. Students can simply report "With" or "Without", select from a list of pathologies for each procedure

configured by the program, or type in the pathology seen, depending on administrator preferences.

**Supervising Employee - *Must be enabled by sonography programs wishing to report continuing medical hours to the Society of Diagnostic Medical Sonography from the Trajecsys Report System.*** "Supervising Employee" is used to designate who supervised a particular procedure or set of procedures. If you don't see your supervisor's name in the dropdown box, you may add a name by clicking "New". If you know that a supervisor will no longer be at a facility, you may also request deletion of that person as a supervisor.

**Total Time** - Using the two sliders, you can rapidly input the TOTAL amount of time on reported procedures. That is, if you are reporting a single procedure, it will be that amount. Make sure to enter these times accurately as they may accrue towards continuing medical hours for the staff sonographers students are with.

### **Site Evaluations**

You must file periodic evaluations of the clinical sites you visit. These are due at the end of your clinical rotation at a site, within 7 days of the end date. If you do not file the site evaluation when requested, you will receive a reminder from the clinical coordinator. Filing these helps the coordinator understand your experience at that site. The clinical coordinator will assign due dates for these evaluations.

### **Comp Eval Items**

You may view or print a list of competency evaluation items for any procedure established by your program. You must visit the Reports-->Procedures link to see your comp eval results. Again, what you are viewing here is NOT the competency exams that you have completed, but the items that appear on the exam. If you don't see an expected exam, it hasn't been input yet. Contact your clinical coordinator or administrator if you believe it should have been.

Other student responsibilities: Make sure you keep track of your own clinical attempts and competencies. Track your attempts, as you need 3 before you can complete a competency. You can look at your progress anytime within Trajecsys.

Other items can be found on the Trajecsys help Page.

## FORMS

The next pages in this handbook contain forms that you will need throughout your clinical experience. Please keep these blank, as these are your master copies. Make photocopies of them when needed.

**MAKE-UP TIME FORM**

Date Absent	Date of Make-up	Time In	Time Out	Number of Hours	Instructor's Initials

**Total Hours** \_\_\_\_\_

Student's Signature \_\_\_\_\_

Instructor's Signature \_\_\_\_\_

Clinical Coordinator's Signature \_\_\_\_\_

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

**CLINICAL ABSENCE FORM**

THIS FORM IS TO BE OBTAINED AND COMPLETED BY ANY STUDENT MISSING A CLINICAL DAY. THIS FORM MUST BE COMPLETE FULLY AND RETURNED TO THE CLINICAL COORDINATOR WITHIN **ONE WEEK** OF THE ABSENCE.

THE STUDENT MUST STILL CONTACT THE CLINICAL SITE AND THE CLINICAL COORDINATOR BY THE BEGINNING OF THE SHIFT ON THE MORNING OF THE ABSENCE.

EXTENDED ABSENCES REQUIRE A DOCTOR'S NOTE AND IT BECOMES THE STUDENT'S RESPONSIBILITY TO ARRANGE FOR ALL REQUIRED CLINICAL TIME TO BE MADE UP.

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

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

Date of Absence: \_\_\_\_\_

Reason for Absence: \_\_\_\_\_  
\_\_\_\_\_

Student's Signature \_\_\_\_\_ Date \_\_\_\_\_

Clinical Instructor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Date Received at SOVAH School of Health Professions \_\_\_\_\_

Program Director's Initials \_\_\_\_\_

## Competency-Based Clinical Evaluation System DMS Program

### Evaluation of Professional Ethics and Attitudes

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

Staff Sonographer(s): \_\_\_\_\_ Date \_\_\_\_\_

\_1 = unacceptable; 2 = requires major improvement; 3 = requires minor improvement; 4 = acceptable; 5 = exceptional

Criteria for Evaluation The student exhibits	1	2	3	4	5	N/A
A. Respect for patient privacy by: 1. Respecting patient modesty 2. Not discussing patient with person not involved in care						
B. Proper patient communication 1. Addressing patient by name 2. Introducing her/him self to the patient 3. Explaining the exam in lay terms 4. Keeping patient informed of exam progress						
C. Proper respect for radiologist and staff physicians, staff sonographers and administrative staff						
D. Proper Technical Skills 1. Correctly sets gain 2. Correctly chooses transducer 3. Correctly identifies exam protocols 4. Correctly follows exam protocol with limited repeated Images 5. Scans within a reasonable and predetermined time limit 6. Correctly identifies and documents pathology						
E. Cooperation with the clinical site staff by: 1. Accepting constructive criticism 2. Observing rules and regulations 3. Asking for assistance when needed						
F. A constant effort to become involved by: 1. Offering assistance to staff 2. Seeking responsible assignments 3. Keeping busy 4. Following exams from start to finish						
G. Dependability by: 1. Seeking exams to be completes 2. Following instructions 3. Punctuality 4. Prompt notification of absence of tardiness 5. Regular attendance 6. Completing assignments						
H. Adherence to program dress code and personal cleanliness by: 1. Wearing appropriate uniform 2. Having hair clean and well kept 3. Shoes are clean and appropriate 4. Nails are natural and kept a neutral color 5. Wearing name tag						

DMS Program  
**Evaluation of Professional Ethics and Attitudes**  
**Page 2**

I. Seeking assistance when necessary: 1. When moving difficult patients 2. In an emergency situation 3. Any situation where the student is not competent						
J. Self-confidence by: 1. The ability to adapt to new situations 2. Instilling confidence in patients 3. Not being over confident 4. Basing decision on clear thought						

**Additional comments on the professional ethics and attitudes of the student:**

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Total number of points \_\_\_\_\_

Student's Signature \_\_\_\_\_

Instructor's Signature \_\_\_\_\_

## Diagnostic Medical Sonography Program

### STUDENT EVALUATION OF CLINICAL EXPERIENCE

Clinical Site \_\_\_\_\_ Semester \_\_\_\_\_

Date \_\_\_\_\_

Rate each item on a scale of 4 to 1, with 1 being the lowest. Give reasons for your rating in the comments space.

**Scoring: 4 = above average 3 = average 2 = below average 1= unacceptable**

- Variety and number of sonography exams performed by department. **4 3 2 1 N/A**

Comments:

- Opportunity to perform these exams. **4 3 2 1 N/A**

Comments:

- Staff's cooperation in assisting you to perform exams. **4 3 2 1 N/A**

Comments:

- Supervisor's and staff's willingness to allow you to perform exams when capable. **4 3 2 1 N/A**

Comments:

- Staff's knowledge of your capabilities thus far in your education. **4 3 2 1 N/A**

Comments:



**Diagnostic Medical Sonography Program**

**Student Evaluation of Clinical Experience**

Page 2

Clinical Site \_\_\_\_\_ Date \_\_\_\_\_

- Staff's attitude toward you as a student. **4 3 2 1 N/A**

Comments:

- Sonography staff's support of program from your perspective. **4 3 2 1 N/A**

Comments:

- Staff's evaluation of you or other students. **4 3 2 1 N/A**

Comments:

- Radiologists' attitude towards sonography students. **4 3 2 1 N/A**

Comments:

- Radiologists' willingness to allow you to assist in exams. **4 3 2 1 N/A**

Comments:

- Department policies and procedures well defined and available to students. **4 3 2 1 N/A**

Comments:

- Equipment functioned properly. **4 3 2 1 N/A**

Comments:

**Diagnostic Medical Sonography Program**

**Student Evaluation of Clinical Experience**

**Page 3**

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

Date\_\_\_\_\_

- Ample supplies of linens, towels, patient gowns available. **4 3 2 1 N/A**

Comments:

- Proper instructions on use of each machine given before use. **4 3 2 1 N/A**

Comments:

- Rate the clinical site overall. **4 3 2 1 N/A**

A. What did you like most about the clinical site?

B. How can this clinical site be improved?

## Diagnostic Medical Sonography Program

### STUDENT EVALUATION OF CLINICAL INSTRUCTOR

Instructor \_\_\_\_\_

Date \_\_\_\_\_

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

Semester \_\_\_\_\_

Student \_\_\_\_\_

**Point scale: 4 = Highly Effective    3 = Effective    2 = Marginal    1 = Ineffective**

- |  |   |   |   |   |
|--|---|---|---|---|
| 1. Knowledge of anatomy when performing sonography exams.  | 4 | 3 | 2 | 1 |
| 2. Knowledge of sonography terminology.  | 4 | 3 | 2 | 1 |
| 3. Knowledge of sonography equipment.  | 4 | 3 | 2 | 1 |
| 4. Knowledge of department routine procedures.   | 4 | 3 | 2 | 1 |
| 5. Ability to explain and communicate ideas i.e. program policies, department procedures and policies. | 4 | 3 | 2 | 1 |
| 6. Instruction and supervision techniques appropriate to student capabilities.                         | 4 | 3 | 2 | 1 |
| a. Instructor's availability.  | 4 | 3 | 2 | 1 |
| b. Instructor's willingness to assist in performing cases.   | 4 | 3 | 2 | 1 |
| 7. Enthusiasm for instruction i.e. enjoys clinical instruction, moderately interested, uninterested.   | 4 | 3 | 2 | 1 |
| 8. Professionalism in:   |   |   |   |   |
| a. Dress   | 4 | 3 | 2 | 1 |
| b. Conduct   | 4 | 3 | 2 | 1 |
| c. Punctuality   | 4 | 3 | 2 | 1 |

**Diagnostic Medical Sonography Program**

**Student Evaluation of Clinical Instructor**

**Page 2**

Instructor \_\_\_\_\_

Date \_\_\_\_\_

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

Semester \_\_\_\_\_

Student \_\_\_\_\_

9. Interpersonal relationships with:

- |               |          |          |          |          |
|---------------|----------|----------|----------|----------|
| a. Students   | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |
| b. Staff      | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |
| c. Physicians | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |
| d. Patients   | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |

10. Enforcement of clinical policies.

- |   |          |          |          |          |
|---|----------|----------|----------|----------|
| a. Consistently enforces all clinical policies. | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |
| b. Fairly enforces all clinical policies.       | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |

11. Would you recommend this instructor to another student?

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12. Would you want to have this instructor again?

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**Diagnostic Medical Sonography Program**

**Student Evaluation of Clinical Instructor**

**Page 3**

Instructor \_\_\_\_\_

Date \_\_\_\_\_

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

Semester \_\_\_\_\_

Student \_\_\_\_\_

13. Do you believe that you were graded fairly?

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14. Did the instructor effectively enforce all clinical policies?

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15. Please comment on the instructor's strengths.

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**Diagnostic Medical Sonography Program**

**Student Evaluation of Clinical Instructor**

**Page 4**

16. Please comment on the instructor's weaknesses.

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17. Other comments:

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## Diagnostic Medical Sonography Program

### RECORD OF ACCUMULATED CLINICAL TIME

Name \_\_\_\_\_

At the completion of each semester the clinical instructor will document the total number of clinical hours (exclude absences). The minimum number of clinical hours must be met, which is 1000 hours.

**Semester 1** \_\_\_\_\_ Hours

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Student Signature

Clinical Coordinator Signature

**Semester 2** \_\_\_\_\_ Hours

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Student Signature

Clinical Coordinator Signature

**Semester 3** \_\_\_\_\_ Hours

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Student Signature

Clinical Coordinator Signature

**Semester 4** \_\_\_\_\_ Hours

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Student Signature

Clinical Coordinator Signature

Total Hours \_\_\_\_\_

Diagnostic Medical Sonography Program

**ACKNOWLEDGMENT OF CLINICAL SYLLABUS HANDBOOK**

I have received and thoroughly read the Diagnostic Medical Sonography Program Clinical Syllabus Handbook. I understand the policies contained therein and the responsibilities to be undertaken.

I understand that failure to comply with the established policies may result in suspension or administrative withdrawal from the program.

I agree to comply with these policies.

Student Name (Printed): \_\_\_\_\_

Student Signature: \_\_\_\_\_

Date \_\_\_\_\_



## Diagnostic Medical Sonography Program

### RELEASE AND PROMISE NOT TO SUE

I, the undersigned, request permission to participate in the Abdomen Extended Sonography/Echocardiography Program (circle one) at the SOVAH School of Health Professions.

I understand that there is no guarantee that this activity is free of risk of personal injury or property damage or loss and that the nature and extent of any damages, present or future, by sonographic waves, is currently unknown. I agree to abide by any applicable College rules and understand that the College reserves the right to exclude my participation at any time if I am disruptive or for any other good reason.

In exchange for being permitted to participate, I release and promise not to sue the Commonwealth of Virginia, the College, its agents or employees, from and for any injury (including sickness or death) to me, or damage or loss to my property, which may occur as a result of my participation in this program, no matter the cause. I understand that the only exception to the preceding sentence is if injury, loss or damage is due to intentional misconduct by employees or agents of the Commonwealth.

I understand that no one, except the Program Director, has the authority or right to change or waive any of the foregoing terms, or to make any representation of any nature to me as to this program, except as may be stated in official College publications.

I represent that I am over the age of eighteen (18). If under eighteen (18), my parent or legal guardian has signed below. I understand that, before signing this paper, I can talk to any advisor of my choice, including parent, spouse, or attorney.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Student Name (Print)

\_\_\_\_\_  
Name of Witness (Print)

\_\_\_\_\_  
Signature of student or parent

\_\_\_\_\_  
Signature of witness

Diagnostic Medical Sonography Program

**PERMISSION TO RELEASE INFORMATION**

I agree that the following information, in addition to the college's designed "directory information", may be provided by the diagnostic medical sonography program to prospective employers:

- 1) school/program activities
- 2) degrees, awards, certificate of completion
- 3) most current grade point average/most current grade point average
- 4) synopsis of clinical performance evaluations
- 5) recommendation of employment

Student Name (Printed): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Diagnostic Medical Sonography Program**

**RECEIPT OF GRADING and ATTENDANCE POLICY**

Each student must sign this form and return it to the program director. Your signature indicates that you have received the grading and attendance policy for clinical education and understand the requirements involved.

\_\_\_\_\_  
Student Name (Printed)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Program Director

### DMS Clinical Competency Form

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

Semester: \_\_\_\_\_ Date: \_\_\_\_\_

Competency ON:

\_\_\_\_\_

ITEM to be OBSERVED	YES	NO	N/A
Checks identification/clinical indication	Yes	No	
Assist the patient in getting ready for the exam (Patient transportation, handling medical equipment)	Yes	No	N/A
Appropriate Patient communication (Explain exam and how clinical indication are related)	Yes	No	
Performs a pre-scan evaluation (Obtains history, checks labs and other imaging studies)	Yes	No	
Saves images with pertinent information (Patient name, MR number, and labeling)	Yes	No	
Can identify Normal Structures	Yes	No	
Can identify Pathology Seen	Yes	No	N/A
Performed scan in a logical fashion	Yes	No	
Can modify the study for pathology	Yes	No	N/A
Utilized knobology to optimize grey scale images	Yes	No	
Utilized knobology to optimize Doppler images	Yes	No	N/A
Appropriately Measured structures	Yes	No	
Adequate Scan time	Yes	No	

Utilized PPE as needed	Yes	No	
Utilized proper ergonomics	Yes	No	
Professionalism demonstrated	Yes	No	
Documented Sonographic Findings for reading physician	Yes	No	
Stored Exam into PACS	Yes	No	
Called Critical Findings	Yes	No	N/A

Areas of improvement:

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Positive Comments:

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Student:

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Clinical Instructor: Signature and Printed name:

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Clinical Coordinator:

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## Expectations and JRC DMS Requirements:

**Patient care**--provide patient care that is compassionate, appropriate and effective.

**Medical knowledge**--demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

- Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results;

**Practice based learning and improvement**--investigate and evaluate the care of patients, appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.

- Perform appropriate procedures and record anatomic, pathologic, and/or physiologic data for interpretation by a physician;
- Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician;

**Systems-based practice**--demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

- Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services;

**Professionalism**--demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

- Act in a professional and ethical manner;

**Interpersonal skills and communication**--demonstrate effective exchange of information and collaboration with patients, their families, and health professionals.

- Demonstrate appropriate communication skills with patients and colleagues;
- Provide patient education related to medical ultrasound and/or other diagnostic vascular techniques, and promote principles of good health.

## Lab Rules for both Abdomen Extended, Obstetrics and Gynecology, Vascular and Adult Echocardiography Courses

These expectations should be followed by all students. Your participation and following of these expectations will be reflected in your grade for the accompanying course.

- I.** Come to lab on time and prepared to scan.
- II.** The lab can only be open if there is a sonographer available for help with scanning.
- III.** Scan with intent to learn. No use of cell phones during lab time, no side conversations irrelevant to the task at hand.
- IV.** Clean up in between scans and after lab hours are over.
  - a. Cords should be put away neatly, no tangles.
  - b. All gel must be cleaned from the beds, transducers, and phantoms.
  - c. All gel bottles should be refilled.
  - d. Machines and beds should be cleaned, and linen changed.
  - e. Machines are to be turned off at the end of the day and unplugged from the outlet.
  - f. Alert instructor if supplies are low, not when they run out.
- V.** Treat the equipment as if you break, you have bought it
- VI.** Treat your scan partner as a real patient.
- VII.** Lab proficiencies are to be observed. You must have an instructor present during your proficiency. Alert your instructor that you are ready to perform a proficiency, and they will assign a student to you. ALL proficiencies are graded.
- VIII.** There will be proficiency days. The instructor will randomly assign an ultrasound examination for you to perform, as well as a partner. These examinations will be selected from exams taught during the semester or previous semesters, with the expectation that you have been practicing these exams. These days will be given out in advance.
  - a. There will be lab finals that work in the same manner. Randomly assigned ultrasound examinations and partners.
- IX.** You have **three** attempts to pass a proficiency. The Third Attempt will be the grade whether passing or not. The Proficiency will be repeated and must have a passing grade before Graduation.
  - a. If it is apparent that a student is not listening to constructive criticism and applying it to their scans, said student may be placed under academic probation.
- X.** Please remember to have outside volunteers sign consent and acknowledgement papers prior to scanning. These papers are to be turned in to the instructor, then you may scan.
- XI.** Those who give you constructive criticism care, accept the criticism even if you don't agree with it.

HOW to accept Constructive Criticism:

  - i. Stop your reaction (breathe, stay calm, know you are okay)
  - ii. Listen for understanding
  - iii. Thank the person for telling you. (It is often hard to tell others how to improve).
  - iv. Process the feedback, look for solutions.
  - v. Follow up later.

## Expectations of students per clinical semester

<b>DMS 232</b>	<b>DMS 233</b>	<b>DMS 234</b>
Shows Compassion to patients	Good working foundation of knowledge (Abdomen, Gynecology)	Excellent general foundation of knowledge (Abdomen and OB/GYN and Vascular OR Cardiac and Vascular) Board Ready
Obtains and reports basic information accurately: answers the "What" questions about patients	Active participant in patient care: consistently prepared for scanning opportunities	Excellent level of patient care: actively suggests management options, answers the "What's next" questions about his/her patients
Open to new knowledge	Consistently able to interpret data: can identify and prioritize patient situations	Has the skill to communicate in a proactive manner rather than a reactive manner
Clearly communicates clinical facts about patients, and follows protocols	Can offer a differential diagnosis	Confidence/willingness to state diagnosis to physician
Uses proper terminology	Not always correct, but has a higher level of knowledge, more skill in selecting clinical findings which support possible diagnoses and applying these to specific patients	More judgment in deciding which action needs to be taken: can tailor exam to patient's circumstances and preferences
Is beginning to interpret data: has basic knowledge to know what to look for in a history and physical	Answers the "Why" questions about his/her patients	Takes an active role in educating themselves, colleagues and patients
Can start to recognize normal from abnormal anatomy	Accepts criticism and enacts to correct	Job Ready
Reliable, honest, hard-working		
Works well with patients, staff and colleagues: solid professional qualities		



## 2 Week Evaluation from Clinical Instructors

Area of Interest	Beginner Student	Intermediate Student	Graduating Student
<b>Patient Care</b>	Misses important components of the sonographic exam or performs them incorrectly	Performs all important components of the sonographic examination correctly	Performs either a focused or comprehensive sonographic examination, as indicated by presenting issue, in an efficient, correct and time-sensitive manner
<b>Medical Knowledge</b>	Has gaps in medical knowledge necessary to fully understand common pathologies encountered during this rotation	Understands etiology, clinical manifestations and pathophysiology of common pathologies encountered during this rotation; Asks appropriate questions to further areas where knowledge is lacking or incomplete	Has outstanding fund of knowledge regarding both common and uncommon pathologies encountered during this rotation
<b>Ability to Interpret data</b>	Demonstrates inconsistent, incomplete or inadequate data collection during history taking	Demonstrates consistent, complete and adequate data collection during history taking	Performs a focused or comprehensive medical history, as indicated by presenting issue, in an organized, complete and efficient manner
<b>Communication</b>	Avoids personal contact with patients and/ or families, lacks appropriate sensitivity	Creates rapport with patients/families through active listening, use of open-ended questions, limited interrupting and use of words that	Communicates even complicated or difficult information or concepts to patients and families and appropriately responds to their concerns/questions

		demonstrate compassion and caring	
<b>Professionalism</b>	Is sometimes unreliable in completing work or inefficient in carrying out required duties	Is punctual and reliable in day to-day tasks; Fulfills basic patient care responsibilities required of him/ her; Helps with team tasks when requested	Takes primary responsibility for patients and advocates for their needs; Anticipates the needs of the team and actively attempts to meet these needs

1. List the student's strengths that you have seen in the past two weeks:
  
2. List the areas of improvement that you recognize:
  
3. Areas of concern related to student progression:

**2-week Student Self Evaluation:**

<b>AREA of Interest</b>	<b>Novice Student Sonographer</b>  (I cannot do this by myself; I do not understand the expectations)	<b>Developing Student Sonographer</b>  (Sometimes I need help, but I'm starting to understand)	<b>Proficient Student Sonographer</b>  (I can do this! However, I sometimes make mistakes)	<b>Sonographer</b>  I can do this without mistakes. I can be a sonographer.
<b>Patient Care</b> <ol style="list-style-type: none"> <li>1. Utilized AIDET method</li> <li>2. Utilized basic nursing skills</li> <li>3. Communicated to patient in friendly respectful manner</li> <li>4. Used two methods to identify patient.</li> <li>5. Checked order</li> <li>6. Obtained appropriate history</li> <li>7. Ability to complete the study in the recommended time frame</li> </ol>				
<b>Medical Knowledge</b> <ol style="list-style-type: none"> <li>1. Understand the pathologies and can discuss etiologies seen within the past two week.</li> </ol>				
<b>Ability to Interpret Data</b> <ol style="list-style-type: none"> <li>1. Able to determine normal and abnormal anatomy</li> </ol>				

<ul style="list-style-type: none"> <li>2. Able to discuss a differential diagnosis</li> <li>3. Able to find and discuss pathology consistently</li> </ul>				
<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>1. Shows compassion, respect towards not only patients but to the staff of the facility.</li> <li>2. Can discuss findings to the ordering physician/or radiologist appropriately.</li> </ul>				
<p><b>Professionalism</b></p> <ul style="list-style-type: none"> <li>1. Reliability</li> <li>2. Team Player</li> <li>3. Responsible</li> </ul>				

- 1. What was the most interesting thing you saw this week?
  
- 2. What do you consider your strengths?
  
- 3. What do you consider your weaknesses?
  
- 4. How can we help you achieve your goals?

## Underperforming Student Form

Based upon the 2-week Assessments, the Clinical Coordinator will answer the following items to try to delineate an underperforming student.

Characteristics of underperforming Sonography Student			
Yes/No	Unenthusiastic Attitude	not asking questions, lack of motivation or interest	Example Please:
Yes/No	Unreliable	poor punctuality or poor attendance	
Yes/No	Displays high level of anxiety	lacks confidence or initiative	
Yes/No	Performance level does not meet expectations	Inconsistent or erratic clinical performance	
Yes/No	Lack of theory, knowledge or skill	provides little evidence to support their learning	
Yes/No	Arriving late/leaving early; unacceptable patient care	patients not left comfortable, poor record of care given, not passing on relevant/important information	
Yes/No	Dismissive of Learning opportunities	“done that before, don’t want to repeat”	
Yes/No	Avoidance of working with clinical instructor	Student avoids exams with sonographers, seeks out sonographers they are more comfortable	
Yes/No	Poor interpersonal skills	insensitive in interaction with patient/client/family, patients are anxious in the presence of this student	
Yes/No	Lack of self-awareness	Student blames other sources as cause of the issue, lack of insight into their behavior and lack of response when feedback is given	
Yes/No	Lack of focus on clinical duties	Preoccupation with personal issues / continual health issues	
Yes/No	Unsafe behaviors	Unsafe practice or judgments	
Yes/No	Professionalism	Absence of professional boundaries and poor professional behavior (see professionalism evaluation for more details)	
Yes/No	Progression of skills	Failure to progress and develop skills through clinical exams	
Yes/No	Not accepting criticism appropriately	Argumentative/not taking no for an answer when wanting a competency	

- A “yes” initiates the remediation plan and Mandatory Meeting with Program Director for discussion.

## DMS STUDENT EVALUATION FORM

End of Semester

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

**Semester:** \_\_\_\_\_

<b>Job Function</b>	<b>Excellent: Exceeding Standards</b>	<b>Average: Meeting Standards</b>	<b>Below Average: Needs Attention/Remediation</b>
Attendance: Lab/clinical			
Independent Operation of equipment			
Independent learning abilities			
Keeping equipment maintained			
Ethics			
Self Motivation			
Demonstration of clinical assessment skills			
Can identify, record and adapt procedures			
Can identify normal vs abnormal anatomy			
Can communicate findings appropriately			
Assumes responsibility for patient safety			
Maintains all paperwork for the program			
Establishes and maintains good relationships with clinical staff, patients, other students and college staff			

Ability to learn and follow protocols			
Ability to cope with emergency situations			
Emotional and physical health to meet the demands of the position			

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

Clinical Coordinator: \_\_\_\_\_

Program Director: \_\_\_\_\_

Date of Meeting: \_\_\_\_\_



*OB Tracking 2<sup>nd</sup>/3<sup>rd</sup> Trimester*

For each patient that you perform a partial OB exam, keep track of what you are scanning. Log in Trajecsys as a partial scan, not for each part, but for each **exam** (patient). If you perform multiple 'parts' on the same patient, still log as ONE partial exam. When logging these exams be sure to write which fetal parts you scanned in the comment section for each log. *Make sure the sonographer signs their initials by each attempt/competency date.* When you have completed a competency on a part, please have the sonographer fill out an attestation form regarding that competency. One attestation per part. This form can be found on the next page. The clinical coordinator will not accept a competency without an attestation. Once you have completed this chart, and attestation forms are filled, turn them into the clinical coordinator. You will then be able to start your 2<sup>nd</sup> Trimester Anatomy attempts.

<b>Part</b>	<b>Attempt #1 Date</b>	<b>Attempt #2 Date</b>	<b>Attempt #3 Date</b>	<b>Competency Date</b>
Amniotic Fluid				
Maternal Cervix and Fetal Position				
Maternal Adnexa				
Face				
Abdomen				
Abdominal Wall				
Spine				



Extremities (Upper)				
Extremities (Lower)				
Intracranial anatomy				
Placenta				
Umbilical Cord				
Fetal cardiac activity				
Thoracic cavity (Lungs, heart views, vessel views)				
Urogenital System				



2<sup>nd</sup>/3<sup>rd</sup> Trimester Fetal Part Attestation Sheet

I, \_\_\_\_\_, attest that

\_\_\_\_\_ (student name) performed the following

partial 2nd/3rd Trimester fetal scan \_\_\_\_\_

independently without assistance or correction. This student is ready to perform this aspect of

a >14 week OB Anatomy scan on their own.

\_\_\_\_\_

Date

\_\_\_\_\_

Signature

## SOVAH School of Health Professions Sonography Competency Log

Please use the chart below to log your competencies. Leave this chart at your clinical site. Sonographers can look back on this list to enter competencies in Trajecsys at their earliest convenience. Remember, any competencies you perform at a clinical site must be in Trajecsys before the end of your rotation.

Student Name	Date	Competency Performed	Sonographer Name	Entered in Trajecsys?	Sonographer Initials (Once entered in Trajecsys)
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	
				Y/N	